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DEVOTED TO THE SCIENCE, ART, PHILOSOPHY AND LITERATURE OF EDUCATION

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FRANK HERBERT PALMER, A. M., EDITOR

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EDUCATION

Devoted to the Science, Art, Philosophy and Literature of Education

VOL. XLIII. MAY, 1923 No. 9

The Psychology of Music

JOSEPHINE WEATHERLY, KIDDER, MO.

INTRODUCTION.

ONCE upon a time the genius of spiritual man appeared before Jupiter and prayed:

"Father, give to man a better speech than he now has, so that he may express his sorrow, his joy, his love."

"Have I not given him the voice, the sigh, the tear?"

"None of these can express all the emotions that come to man."

"Well, then, replied Jupiter, "I will give him the best gift of the Gods—*Music,* which he may use while upon earth; but which he must bring with him when he finally returns to the Unmeasured Life."

And from that time on the human heart can speak.[1]

EDUCATIONAL OBJECTIVES.

The purpose of education is to form habits, give knowledge, set up ideals, develop tastes and attitudes, and give the emotions a sane outlet. In this broad sense it is cultural as well as practical; and it is under this definition that music in the public schools is held to be legitimate.

The fallacy of our present scheme of education is that music is

1. Jean Paul Richter.

only for the people of leisure—of means. We follow such educators as Herbert Spencer, the McMurrays, Bagley, Bobbitt and others who believe in training for leisure for all the children of the land.

"That music plays an important part in the life of a people and should, therefore, have an important part in education has been understood by the foremost educators for 3,000 years. Among a practical, industrial and commercial people,, like ourselves, good music is necessary not only for enjoyment and recreation but also for inspiration and salvation from death in the din and dust of trade. This music should be democratic in the truest and best sense. This it can never be until it becomes an integral part of the education given in the schools of all the grades as it is in Germany, for instance, where every teacher must be able to sing, and play either the violin or organ, and where every child in the Volksschule learns to sing and play; and as it was in the best age of Grecian culture. It is through a clear understanding of this fact that music has been introduced into the schools of many cities and towns. Sooner or later, we shall not only recognize its cultural value but we shall also understand that after reading, writing and arithmetic, music has greater practical value than any other school subject."[2]

"It is probable that a sort of music teaching that would give intelligent appreciation ought to find a place in a complete musical-educational scheme."[3]

"An appreciation of good music, whether as auditor or producer, is desirable. Education should therefore make as great contribution to the development of a wide-spread musical appreciation as practicable and should enter abundantly into the general life of the school."[4]

"Music is one of the best sources of inspiration to a higher adjustment of life; but that it may reach its highest influence, we must develop the ability to use its language; for music, like speech, is only powerful as it becomes the common possession of all.[5]

2. P. P. Claxton, U. S. Commissioner of Education.
3. H. G. Wells, from "Mankind in the Making."
4. Franklin Bobbitt in "Curriculum Making in Los Angeles."
5. Hethrington in "Music in the Schools."

"We need music for our leisure as we do vocations for bread winning, and both are the business of our public schools.[6]

"Would that our schools paid as much attention to music as they do to the natural sciences. Although science is my field, I believe that all is well with the man who has been systematically taught to weave music into his daily affairs, and who can always hear the fitful strains of winds that out of Dreamland blow."[7]

Who does not recall Darwin's pathetic lament. "The loss of this taste (music, to which he paid considerable attention in youth) is a loss of happiness. My moral character was enfeebled by this loss of the emotional part of my life. No honors that have ever come to me will ever make up to me for this irreparable loss."

"Every American child should start out in life pretty well equipped to speak and to understand the universal language of the heart. As an asset for sane living it beats Greek, Latin, French and German all to pieces."[8]

"Music is no longer a luxury but a necessity. Its rhymthic beat and its seductive melody surpass the cup of coffee or tea, the pipe or even the sedative and narcotic affects of deadly drugs.[9]

"The National Government is doing everything in its power to raise horses, cattle, pigs, chickens, grain and fruits. Are boys and girls less valuable commodity than clean hogs? Is it not worth while to put music into our schools to help fight the human pests, the animal passions that infect our young people, as it is to fight fruit pests?"[10]

Democritus affirmed that diseases could be cured by the melodious sounds of a flute. And Aesclepiades employed the blare of trumpets twenty centuries ago to cure sciatica even as today in sanatoriums and insane asylums music is used to soothe violent patients very much as David exorcised the evil spirit out of Saul with his harp arpeggios. The psychology of this is simple. All life is in the form of vibrations and music is simply rhythmic

6. President Burk of the San Francisco Normal School.
7. David Star Jordan of the Leland-Stanford University.
8. David Frohman, the noted theatrical manager.
9. Dr. Harvey W. Wiley, American Sanitarian.
10. Dr. Charles Farwell Edson.

vibrations that set into like harmonious rhythm the disturbed vibrations of the human organism commonly called disease.[11]

"I firmly believe that the world's ills, mental as well as physical will one day be cured by the scientific used of music. Psychologically, no other agency in the world can do it like music can. I wish our schools would see to it that we *inoculate* our young people through music. We would not have them fall victims, so easily, to diseased bodies and minds!"

"One of the great joys of my long life was that I had music all the way—in my boyhood, in school, in social activities, in my married life, and I wish that the band might play at my funeral. The parent who denies music to his child is handicapping him in his life work. Start the child young, with a tin horn, a drum, a comb with tissue paper. We take pains to teach him a language that leads to *one* people. Let us give him *music* that leads to all hearts and unlocks his own!"[12]

Origin of Music.

What is the origin of Music, its development and its psychology?

In general, it may be said that music is an old experience of the race. It has always been more or less mystical but, at present, we have subjected it to the analyses of the psychologist and are beginning to understand its laws and principles.

Man in primitive times received his education from the activities of his home, his tribe, his religious rites and ceremonies. These were simple, consisting of the means of self-preservation, of procreation, of propitiating gods, of warring with neighboring tribes and of satisfying his animal passions. Then through the long, slow struggle upward, man's surroundings took on a newer aspect and he longed to express himself in higher feelings than the instinctive drives of necessity.

Music arose in the race out of man's joyous response to rhythm, tone and melody of the world of sound in nature about him. The swaying of the branches, the whispering of the leaves, the lapping of the waves, the singing of the birds, the lowing of the cattle, the

11. Charles Brodie Patterson, Editor of "Arena."
12. Charles Heber Clark (Max Alder).

sighing of the wind, all, all were rhythmic as well as tuneful and melodic; but man, at first, responded only to rhythm.

"In the dim past man's psychic life was different from what it now is; feeling, instinct and impulse were all and they were common to all.

Music is the speech of this antique, half-buried racial soul. Darwin thought that it came from love-calls. Spencer thought that it was the tone-colored accompaniment of speech. But it is older than language, as Weissman, Boaz, Gaultman say. While musical capacity is latent in all primitive races, (and in children as they enact the race experiences) birds, which evolved before man, had this art. So did animals and insects, first of all creatures to emerge from the primeval sea. Indeed, we can stretch it to encompass all acoustic expressions; the wind, the rain, thunder, sea are the oldest musicians. If we wish we can go still farther and say that vibrations and impacts are as old as matter, heat, light or even atoms and electrons.

All energy is rhymthmic and cadenced, so that what Plato called the music of the spheres is not fantasy but science.

To all these influences protoplasm, which is the vital product of all cosmic elements, responded from the first for it is the material soul of all, long before a special sense was developed for it.

Thus, the man has shed many of his old responses, the human ear is the result of a longer developmental process which has made it the most specialized organ of response that man has.[13]

"Thus in Music man may today dimly revive the most ancient elements and experiences in the history of his soul. If heredity is cell memory, the aesthetic response to music is the awakening of echoes far older than the earliest acoustic organs and in his process a man remembers the earliest as well as also the subsequent stages of his evolution. It is the art of arts because most prehumanistic and also most prophetic of the hereafterman who shall again return to the cosmic from which he came.

Marlo Pilo (Psychologieder Music) says it utters the essence of

13. G. Stanley Hall, from a speech delivered before the National Music Teachers' Association.

things; best explains the world, is the chief interpreter of religion, and it propounds and answers the ultimate problems of life.

Schopenhauer says, "Music is the last word of the highest philosophy and the revealer of ultimate metaphysical being of the will and soul."

German Aestheticians say that music expresses all the cosmic emotions, utters every potential as well as every actual feeling; that its kingdom is not of the present only but also of the past and future world. It utters all longings.[14]

Among savages and children music, as a form of behavior, has several distinct origins.

"The primitive warrior struck his spear on his shield. Later the drummer sat apart and beat rhythms for the dancers. These rhythms gave nervous shocks which brought rhythmic reactions.[15]

"Rhythm is the first of primitive music—tum-tum origin. Its chief features are cadences and repetitions. It is a system of beats, accents, stresses, stepping, patting, tapping and striking.[16]

"As rhythm became complex there came a natural demand for differentiated sounds. Drum sticks of different lengths produced different pitches. This is not wholly sensory but a complex form of reaction or behavior. Heart-beats, respiration, tension of voluntary muscles, contractions and relaxations of hand, arm and trunk are the bodily reactions. Even rude rhythm arouses desire to beat time or to vocalize."[17]

"The child, who begins by rhythmically striking one object with another or by keeping tab of successive sounds, who checks off his fingers as he learns to count, hums or vocalizes a tone over-and over, perhaps slowly evolving and intricating it, or learns to beat time, march, sway or gesture, has begun to ascend the long way by which the race began its musical development."[18]

Music thus is evolved from within. It is subjective in that it appeals to that which is inherent and hence gives pleasure as to all instinctive expressions.

14. G. Stanley Hall, from speech delivered before the National Music Teachers' Association.
15. Charles H. Judd, from "Psychology of the High School Subjects."
16 G. Stanley Hall.
17. Charles H. Judd, "Psychology of High School Subjects."
18. G. Stanley Hall, Address delivered before National Association of Music Teachers.

It is also peculiar in its tribal development. Some peoples use 2, 3, 5 or 7 tones in the musical scale. Some sing in the minor key, the key of sadness and heartache, while others use the major key of joy and courage.

The scale of a people becomes conventionalized from use so that the people may adapt themselves more readily to change of food or clothing of another people than to their music!

This may be that as music is the language of the emotions, and as emotions are common to all peoples, it is no need to change music as it is, basically, common to all peoples.

Not only is music explained, psychologically through its rhythm as influencing behavior, but it has fixed relations to the intellect and to the emotions.

By emotions we mean those humanistic, complex feelings that are aroused in man by contemplation of the beautiful, as shown by the heaving bosom, the flushed cheek, the glistening eye, the erect posture, the uplifted brow when in the presence, of the restless sea, the majestic mountains, the glorious sunset, or when listening to Dvorak's World Symphony, Milton's Comus, or when contemplating Raphael's Sistine Madonna or the ravishing sculptured form of Venus de Milo, and not those lower feelings that man has in common with the lower animals.

Emotions, if we must define them to educators before they will admit that music has a function in molding lives of children, are those complex combined mental and physical activities of the human organism which follow, as stated above, upon intellectual appreciation of the beautiful as opposed to the purely functional derangements of the system that come from nervous shocks.

"All higher emotions of man, though affecting the body are connected with the intellect.[19]

"Emotions are awakened through the medium of the intellect acted upon by sensations through the neural processes. Only intelligent creatures can be emotional, accordingly."[20]

[The idiot never weeps or laughs; neither does the brute.]

19. "Music as related to the Emotions and the Intellect."
20. "Music and the Emotions."

Sound is the human ear. It is the vibrations of air waves impinging on the typmpanum and the fibers of Cortis tell the brain that various voices, instruments of different tones and pitches, have been performing. When we listen to music each hearer has sounds only in his own head, purely subjective "Music is the most subjective of all arts."[21]

Out of the many sounds of various pitches which could be produced by the human voice, mankind, long ago, began to select and arrange some in a definite order. Scientific law of music was thus developed out of man's generalizations and the result is a musical scale which is merely differentiated music from mere mechanical noise.

"The construction of scales and of harmonic tissue is a product of artistic invention."[22]

Such nations as used singing to recite the prose stories of their heroes did not get the intellectual concept of rhythm so well refined as those who associated music and poetry. In time, song, dance and poetry were bound together by their mutual relations to the law of rhythm and emotional responses were the result. Then instruments were constructed to accompany song, poetry and the dance, and the concept became more intellectually emotional.

In time it was discovered that music all in one key lacked interest if protracted; so new tunes in new keys were introduced, and these developed into harmony; and these arranged in suites or movements gave us symphony. Then when instruments began to accompany voices Oratorio and Opera were born. Thus it is seen that music has a musical notation or language that has an intellectual development which makes of it a science as well as an art, while at the same time the emotions are aroused by the rhythm, sound and combinations of sound that are instinctive and sensuous. Thus music stands the test of the intellect and of the instincts of man.

In short to listen to music, to appreciate it requires sensation, emotion, aesthetic feeling and intellect. What other school subject can justly claim as much?

21. Hegel.
22. Helmholtz.

Music in the Life of the Child.

Music study to be productive of the greatest amount of development must be begun early, when the mind is alert and receptive when the emotions are on "tap", so to speak, when the sensations are standing on tip-toe of expectancy and when the muscles of hand and throat are pliable so they can be acted upon by mind; for in reality it is the brain that sings and plays rather than the fingers or the vocal cords. Expression in music is manifestly but the outward sensuous side of an inward mental conception of melody, rhythm and harmony. Before there can be any expression there must be impression; that is, a certain state of thought and emotion to express form. Hence, a mastery of the psychology of mind and the knowledge of the physiological organs of response must be in possession of a successful teacher of music.

The child enters spontaneously into musical activities of all kinds. He runs, skips, hops, dances; he vocalizes; be blows with his mouth, drums with his fingers and picks tones out of everything he touches. Even a baby makes bodily responses to music. Our richest gems of music are the lullabies of all nations. The best the school can do when the child comes to it is to recognize these joyous, innate responses and fix them by judicious exercises. Perhaps the contrast between these crude, semi-barbaric activities of the child and the finished product of the musician might lead us to imagine that they are not worth cultivating. The contrast is not in the psychological origin but in the developed skills and tastes in the tools or symbols and in the forms of music and this we can do for him. Though the child's activities are crude they yet contain all the psychological potentialities for an adult's symphony and oratorio.

In 1915 the report of the Secretary of the Interior showed that there were 22,000,000 children in the first grades. By the time these children are 12 years old only one half of them is left. What the school is to do for them must, therefore, be done early. What is more, if the child's latent, potential rhythmic and auditory faculties are not cultivated at this early stage, the chances are that when he reaches adolesence they will be too much atrophied

or pushed into the background by the three R's that we so religiously and presently pound into him.[23]

"Music is as real a contribution to humanity as is the multiplication table."[24]

Why does a boy whistle when he is afraid? Why does the soldier sing the songs of homeland?

"Yea, by the rivers of Babylon we hanged our harps upon the willows and we sang and wept."[25]

Why does the housewife go about her work humming snatches of melodies?

Why not repeat the mutiplication table or have a spelling match. If we did, the school stunts people would set us down as *looney*; but everyone understands the psychology of the tune, the song and the melody.

In teaching we must bear two things in mind. *First*, that rhythm is *ordered* movement. It develops regularity of action in all of the vital functions. It is a healthy stimulus to children of a sluggish temperament. It corrects the spasmodic movements which lead to serious nervous disorders, such as fidgeting, stammering and St. Vitus dance. Subject to the laws of rhythm the vital forces flow in their normal channnels and that spells *health*.[26] *Second*, Rhythm is music to the muscular sense. Just as well-ordered tones are music to the ear and harmonious combinations of color are music to the eye so the rhythmic flow of movement is music to the nerves that control muscular actions. Who can doubt this as he notes the graceful movements of dancers. Best examples, Pavlova the world-renowned Russian artist.

"The Mother-Goose Melodies are the musical classics of childhood. They are the outgrowth of child experiences in past ages."[27]

At first the child's muscles move in mass, but by degrees they become differentiated.

The earliest stage of musical instruction is mainly receptive, hence the lullabies and songs should be very abundant, rhythmic

23. McPherson, Thomas, Music and the School.
24. Dr. E. A. Wiship, Editor of The Journal of Education.
25. Bible.
26. Dr. Harvey W. Wiley, eminent physician.
27. Mrs. Jessie Gaynor, composer of songs for children.

and somewhat melodic, but no harmony as yet. That calls for a complex concept. The hands are most under the child's control and these should be used in clapping loud on the accented beat. Next the feet may be made to keep time to the rhymthic beat. Then the tongue bugle is added to this. This co-ordination is a very valuable exercise. At first children will clap very hard, stamp the feet and yell the song. By practice these will tone down and become artistic and in time will react on the child's nature.

"Children learn to use the word language by listening and talking. In like manner they learn to use the language of melody by listening and singing, hence they should have daily exercises in singing songs suited to their vocal powers. It is easier for children to get the melody than the words, (psychology of this given earlier in this paper) therefore they should "*la la*" the music first and then gradually add the words. Although no technical voice exercise should be given little folks, let them bark like a dog, low like a cow, ba-a like a sheep etc. These will exercise the vocal organs. To get the whole range of the voice they may personate dogs of different sizes from the deep-toned large dog to the piping voice of the little pup; from the voice of the father ram to the cry of the little lamb.

The humming of bees, the rising and falling of the wind, the pealing of church-bells, or the humming of familiar tunes is to be on their own mouth organs. Devotion comes naturally to a child. Let them sound the bell which calls to church, then have all the mouth organs hum the music of the hymn."[28] Singing develops the social side of the child. He cannot work much in the modern home but he can sing with father, mother, sisters and brothers and his little playmates.

Morals can be conveyed in melody that would be considered forced if expressed in words alone. So also information. Call to mind the old-fashioned geography and spelling lessons intonated to rhythm.

A child's song, after the first few years should begin to introduce

28. Catherine A. Strouse, Teacher of Music in Primary Grade Training School, Kansas Normal.

much melody as against too much rhythm. In teaching a tune it is unfortunate that teachers depend on the piano so much. This makes the child dependent upon the instrument instead of upon his ear. Later also, he will run to the piano to see how a new selection goes, instead of reading it from the notes. See how inconsistent we are in our teaching of music. We do not teach reading of the vernacular that way. We do not put the reading lesson up to a machine and expect it to tell us what it is about. I know whereof I speak, I have seen hundreds of children read the melody of a new piece right from the staff without use of an instrument. Where our music teachers fail to do this they give the child no way to help himself in after years to broaden his musical repertoires. He will always depend on the artificial, mehanical piano, or get the selection by imitation after hearing some one else sing or play it.

An accompaniment to a song should not be given a child too soon. It contains the harmony, and, as we stated before, it requires a complex mental reaction to get it, of which, as yet, he is not capable. It also covers up the melody, the thing he ***can*** and *should* get.

Music helps in making the school a happier place for the child. He is *so* lonesome when he first comes to school. Words, numbers, books do not appeal to him. They are foreign, but music—ah, *that* he got from Mother Nature. Many a strange child will refuse to take part in the regular school exercises—but in music, no! He opens his mouth, claps his hands and is as good as any in the group.[29]

As schools are largely competitive, individualistic, full of rivalry and ambition from the first grade up, music will tend to restore normality, co-operation and general good fellowship. The psychology of that is the common emotional tone of music.

Children should be taught to sing all songs with a beautiful tone. Heartiness does not mean harshness. Loud singing is not good singing. Indeed, the psychology of it is bad for it has no aesthetic effect. The foot-ball yell has a place but do not call it music.

29. **Marie Weatherly, Director of Public School Music, Kansas.**

It is not the purpose of this paper to give the steps and the subject-matter that the schools should give in teaching music, but all authorities agree that it is just as essential to teach the symbols of music (notes, rests, bars, staff, signature of key and time,) so that children can read music, as it is to teach words, sentences and spelling so that children can read books. And what is more it is not a bit more difficult. Indeed, it is easier because the psychology of it gives us its basic factors, rhythm and melody, innate to man. *Imitation,* as in learning to *speak,* is the *key* to singing songs. Then teaching phrases or musical sentences is the next step. Just as in teaching reading we begin with the sentence and work backward and forward. The trouble is most teachers in music start with the dead mechanics of notes, staff etc. The time for such unpsychological pedagogy is past.

"Other nations sing because children are encouraged to sing at home. By imitation they follow mother in her songs as she goes about her housework and father as he goes about his fields. America must begin with her children if she wants to have a happy, musical appreciative adulthood."[30]

After this early stage of imitation, then, must come the mechanics necessary to master music and make of it an art. This should be the work of the grades, with abundant opportunity right along to live the experiential life of music in choruses, cantatas; singing on special occasions suitable music as on Christmas, Easter, Thanksgiving, Washington's Birthday, May Day, Arbor Day, Flag Day, Memorial Day, Fourth of July, Columbus Day and the birth days of musicians and poets and even the children's own birthdays.

The songs of the different nations and folk songs, negro melodies and patriotic songs ought to be the common property of all school-children.

"Folk songs are store-houses of most beautiful melodies and unfold to the mind the inner character of the different peoples."[31]

In cities where there are many foreign children this is a most powerful factor in Americanization. The psychology of this is, as

30. David Bachellor, an authority on music.
31. Robert Schumann, composer of over 600 songs.

we showed before, that emotions, common to all races, are fused into one through music; and since music is sung in American schools, it makes Americans of the little foreign children in feelings. And what is more they sing these *American* songs at home to foreign mothers and fathers, (again as shown before foreigners sing more about the homes than do Americans) and they too, respond to the common bond and American behavior is the result.

"Let one write the songs of a people and I care not who makes its laws,"[32] is psychologically sound.

Patrick, who had been in America but a short time, was very much taken with "Yankee Doodle." He learned the tune,—also something of its history. One day, on Broadway, the band was playing "Yankee Doodle" to *beat the band.* An Englishman met Patrick and asked what was that tune the band was playing.

"Begorra," said Pat, "that's the song with which *we* licked you British and sent you skeedaddling across the water with your lion's tail between your legs." "Yankee Doodle" had made an American of him![33]

Music in the Life of the Adolescent.

What has been emphasized of music in general, and in the development of the child, is basic to what music will be to the adolescent in the years of his high school. It is for that reason that so much time was taken in developing the subject.

The youth in the high school ought to be able to read at sight most songs of sentiment, nature and patriotism so as to be able to add to his already large repertoire of folk, national and home songs and hymns. Songs by Carrie Jacobs Bond, Mrs. H. H. H. Beach, Chadwick, De Koven, Page, Bullard, and lyrics of the masters, as found in Moore, Burns, Tennyson, Longfellow, Shakespeare and others ought now to be acquired. Where in after life, the boy and girl, grown to man and woman, will have occasion to *recite* one of these poems, or for that matter any poem learned in the English class, *once*, he and she have occasion to sing or whistle them a thousand times.

32. So oft repeated that the writer could not find the author.
33. Heard from a Chautauqua speaker—name forgotten.

Conwell -

The work here should also become broader and more comprehensive so as to include part songs, anthems, operas, oratorios together with choral work arranged for soprano, also tenor and bass. Then there will be class songs, play songs and much general assembly singing, so that by the time a pupil has gone through 12 years of school, beside having the definite ability or *power*, as we now call this, to pick out tunes for himself, he will have from 300 to 500 compositions, a repertoire large enough to sweeten his whole life and to act as a "*drive*" to attend concerts, operas, symphony orchestras, and to stand in with the cleanest people in the community.

It is the practice in most high schools to assemble for opening exercises. In schools where there are as many as 3,000, students think what an uplift and inspiration these pupils get from their singing! Every morning, five days a week, thirty-six weeks a year and twelve years for some! [And how we can understand what the old fashioned "*Singing Schules*" must have been to our grandparents.] Then add to this assembly singing orchestras, as is done in Boston, Philadelphia, Chicago, etc.,—200 and 300 instruments—and the cultural, aesthetic and social influences thus created tax the imagination to conceive! If the music since first introduced by Lowell Mason in 1838 into the high schools could show nothing more than this volume of melody from 18,000,000 young hearts daily, it would be enough!

I once heard a teacher say she was glad to get the pupils after they had been singing. They were so wide-awake, mentally alert and socially inclined then.

"But we are sorry to note that both the purpose and the methods are not understood by those who have charge of the music work in schools. They are not prepared pedagogically and not fitted musically to undertake so important a work.

Appreciation rather than high proficiency in technical accomplishment is the large aim of music instruction.

Whatever knowledge has been gained in the grades should begin to function definitely in the lives of the adolescents.

If pupils are even to be interested in and appreciative of the

best in music we must give it to them now. This is necessary in order to articulate music of the school with the community life that the adolescent will soon enter.

Effect of music is realized in a peculiarly vital way when the individual takes part in it. Ensemble music, both vocal and instrumental, has thus a psychological value in the high school. A well-conducted glee club not only calls into play musical abilities but a certain co-operation with others—the social instinct, so strong in the youth, in working out a common purpose and a common ideal. It is thus truly democratic and fits our American ideals.

Shall those who do not sing well be allowed to be in choruses? By all means. One careless, indifferent performer may mar the beauty of the whole rendition. His appreciation of this fact teaches him a lesson of interdependence of social relationships and leads both to the joy of social solidarity, and also to a desire to improve so as to do his share of group work. Besides, the real psychological value is even more than the social value and the fact that the youth is whipped into improvement by the ideals of the social group; it lies in the big *fact* that the school and the chorus is where it is for the sake of the *individual* and *not* the individual there for the *sake* of the *school* and the chorus!

To take part in choral society of one's town; to play in the band or orchestra, to be one of an appreciative audience at concerts, to help with the church music, to add to the pleasure of your crowd at a party, and best of all to sing and play in the family circle—all of which our young people will soon be called upon to do—means happiness and enrichment of life, and is a direct challenge to the schools to prepare for this great humanizing task.

The study of the music of other times and other people gives us the key to the social life of those times and to those peoples.

Study of the lives and works of great composers as men of high ideals, broad culture and great achievements, broadens the pupils' interests and deepens their sympathies.

Musical performances, undoubtedly, bring together as many people as any one single agency. [The movies not even excepted

for the best part of a movie is the music. It *blends* the people together so that they see about the same things. If you do not believe this watch how the attention is broken and how restless, conscious and individualistic the crowd becomes, whenever the music stops.] What is the school doing to prepare the youth to be an intelligent and valuable addition to these gatherings? And to congregational church singing?

Complex sociological problems, short hours of work, and much, leisure are taken care of by music as by no other agency.

As a vocational subject music has great psychological value in the high school. Even as vocations call for efficiency so do musical vocations, because in each case efficiency is largely determined by the laws of attention, repetition, and the determination or "*set*" of mind to get on.

An army of persons is engaged as musicians in this country and $600,000,000 are spent annually on musical performances and in musical education. The number of high school graduates who go into music is comparable to the numbers that go into other occupations. Yet ample provisions are made for prevocational training in other lines, and only meager for music.

The state of Pennsylvania is making wonderful provisions for music. In most schools, instruments are taught to those showing talent.

Grand Rapids, Milwaukee, Chicago, Madison, Cincinnati and other cities are now falling in line and are paying big money to those who can handle work of this kind.[34]

[The city of Coffeyville, Kansas, population of 18,000, pays a man $3,300 for conducting the music of the high school, for supervising the grades and for looking after the community music which now consists of a big community chorus, 3 bands, a community orchestra. The city says it is the best investment it ever made.][35]

In many cities, also, the high school choruses, orchestras and bands are regular feeders for similar organizations in the town

34. Josephine Weatherly. I have attended their community *sings* and they *are* inspirational.

35. Wm. Earhart and Claxton in article U. S. B. of Ed., 1917, Vol. 49. This is a resume merely of a long article.

and for church choirs. See how that appeals to the adolescent who *feels* he is grown up? Isn't that psychology for you?

In many cities credit is given at school for music taken outside from a first class music teacher. Recently I heard a girl say, "I am the only one in my crowd who is keeping up her music. The others find their algebra and Latin too hard to permit out-side music." This ought not to be so. We are thoroughly familiar with the intellectual value of Latin and mathematics (although most pupils forget them as soon as the commencement dress is taken off). These same girls, who eventually will become wives and mothers, are not likely to discuss logarithms over the breakfast table; nor are they likely to spend the evening solving quadratic equations or hurling Greek roots at their husbands and children. But you will find them, if *properly* taught in music, [by properly I mean as much attention to music as is given to mathematics and the foreign languages] at the piano singing together and later on, the little ones that dream off into "Slumber Land" will do so to mother's "Hush, my Babe, Lie still and slumber" or to father's "Baby Mine" and not to dissertations on regular polygons.

Orchestras make a peculiar appeal to the adolescent. "He is more under domination of emotional than intellectual stimuli. He feels more than he knows and more than he dares to express in words. He is ripe for getting hold of things and letting things get hold of him."[36]

"He wants to be thrilled and to thrill others and he can get more meanness out of himself when he beats the bass drum or blows the cornet than if he worked a thousand algebraic equations or conjugated Latin verbs till doomsday."[37]

The youth is afraid of being accused of sentimentality if he goes in strong for singing so he gladly takes to an instrument. Here is an anecdote that fits in so well that the writer cannot resist the temptation of giving it.

"Bobby's father was an organist of repute, a calling for which Bobby felt a little apologetic when having occasion to explain it to his friends. A policeman, now, or a fireman, those are pro-

36. Smith in "Music and Life."
37. A. Weatherly, from a speech on "Value of Instruments in High School."

fessions a fellow can boast about! One day he was overheard in conversation with a boy who asked.

"Boy, does your father play?"

"Yes," admitted Bobby, without much enthusiasm.

"Well, what does he play,—the cornet?

"No," answered Bobby, half-heartedly, "He plays the organ."

"And does he sing, too!" persisted the chum.

"Goodness, no!" indignantly exclaimed the musician's son, "We wouldn't stand for that!"[38]

Work in an orchestra or band calls for sense of tune,—notice how particular musicians are in *tuning* up—sense of rhythm, come in at *exactly* the right time and with the correct modulation and some downright hard digging in order to read and to play good, *new* music from time to time. Team work is also a result not to be ignored in the life of the adolescent. It is "harmonious social behavior."[39]

Bobbitt and others advocate much chorus singing and the playing of musical instruments as modes of *moral* health—prophylactics—catharses.

We have shown before that one's mental and emotional states contribute to one's physical well-being so that the organism that is attuned to harmony is likely to be a sound organism physically. Music in the high school on this plea alone ought to be worth as much as athletics.

It is desirable to train our young people to be executants; but it is even of greater importance to train the ear, the eye and thus the mind to be perceptive of nice distinctions of time, melody and harmony and to form habits that will carry over into adult life. [Not transfer to some other field, but simply to "Carry On" into later years, work begun in youth.]

We call this a certain kind of appreciation which "does not depend on ability of performer but upon one's ability to follow as an auditor matter originated by another."[40] We show our appreciation by behavior of attention and emotional responses of

38. Harper's Magazine.
39. Judd—Psychology of High School Subjects.
40. Chas. H. Judd—"Psychology of High School Subjects."

various kinds mentioned earlier in this paper. This appreciation is a "mental process capable of training under direct guidance."[40] It comes through listening to much good music. But *listening* is a direct challenge to the intelligence for it takes all the mental alertness one has to get rhythm, melody, quality, ensemble, different media that voices and instruments have as they carry a selection from its opening chords to the big finale. This is the psychology of a selection as a whole in its effect on the listener.

"We hear the expression so often—'I have no ear for music.' Well, you would have if you had been trained to listen to music properly when young." An authority says only 2% of children are totally destitute of "ear;" but that the faculty of appreciating sounds and rhythm dies rapidly through neglect so that it is true when young people say 'I have no ear.' "[41]

"Music calls for more than the appreciation of a picture or a piece of sculpture for they are fixed for all time. We can stand and look as long as we please; but music is conditioned by time. It flashes past. We must be keen to catch each tone, because others follow right after and push the first along."[42]

In the last few years musical appreciation has made wonderful strides in our schools. Encouraged by the Notional Music Association and the availability of the phonograph and records our children are learning to know and to love Melba, Alma Gluck, John McCormack, Caruso, Anna Case, Galli Curci, Mischa Elman, Jan Kublik, Kreisler, Schumann-Heink, Gilmore and Sousa and hosts of other artists whose talent the world recognizes.

Then a list of fifty selections from the instrumental masters are being taught and examinations, from time to time, reveal the gratifying fact that thousands of children, as young as twelve years, recognize the selections and can name the author and that the boys whistle these classics and the girls call for them in records and in sheet music for home reproduction and so the good work goes on and in time, the whole lump will be leavened. Let us hope that, as time goes on and other selections are added to

41. Mrs. Dorritt Wilson—Music.
42. Read somewhere. Author and place not now remembered.

this list, "jazz" will be driven out from our midst, even as we hope by good speech appreciation to drive slang out of the English language.

Youth needs to hear music of great beauty and variety. Great things are not made mediocre but mediocrity gets what it can of greatness.[43]

Seashore on Musical Ability.[44]

Carl E. Seashore of Iowa State University has done a most wonderful piece of work in analyzing musical ability. This paper cannot do justice to the discussion in limited space and time. Suffice here to say that he has made psychological analysis of music both practical and scientific.

The tests require certain records, prepared by the Columbia Graphaphone Company; and other material by means of which an individual can find out definitely just how *much* and what *kind* of musical *ability* he possesses. Used diagnostically it warns the untalented youth so that he can save both time and money in not allowing himself to be persuaded by ambitious parents to study music. It likewise encourages the talented one to go on and make something of himself. It even helps the mediocre one by pointing out just what good points he has so that he, too, will get all that is coming to him from music.

It also has achievement values so that teachers and students may see what progress is being made from time to time because of training.

With the psychologist working on this great problem of musical instruction in our schools, the outlook is very hopeful for the future.

"When there is more music in the homes of America there will be fewer divorces. There is more domestic discord in the American home, more truancies, incorrigibles and unfaithfulness than in any other country on the globe and I believe it is because there is not enough cultivation of the finer things of life. The situation should lead Americans, especially those who measure life through the cash register, to a newer appreciation of music.[45]

43. Chas. H. Judd—Paraphrased. Psychology of High School Subjects.
44. Carl E. Seashore, Director of Music and Psychology, Iowa State University.
45. Walter Damrosch, Conductor of the New York Symphony.

SEASHORE TESTS BASED ON THE FOLLOWING CLASSIFICATION:

I. Attributes of Sound,
   - *a.* pitch
   - *b.* extensity.
   - *c.* intensity.
   - *d.* duration.

II. Recognized powers of the Mind.
   - *a.* rhythm.
   - b. timbre.
   - *c.* consonance.
   - *d.* pitch.

III. Musical Memory Imagination.
   - *a.* auditory
   - *b.* motor.
   - *c.* creative.
   - *d.* memory span.
   - *e.* learning power.

IV. Musical intellect.
   - *a.* musical free association.
   - *b.* musical powers of application.
   - *c.* general intelligence.

V. Musical feeling.
   - *a.* musical taste.
   - *b.* emotional reaction to music.
   - *e.* emotional self-expression in music.

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Sensings and Realizations on Reading "The Great Stone Face"

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WHENEVER one approaches the color, characters, and opening events of a story one has a multitude of sensings and realizations,—so many, in fact, that could he record all those that are both vivid and remote during a period of five minutes, he might easily have material for a small volume of experience. Every reader has accustomed feelings during his moments of reading, without conscious reasons for them. These are called sensings. They may be developed from feelings that already exist, or, in the second place, from the influence of either story or teacher or both.

Perhaps the author is clever enough to make things exceedingly real for the reader in the opening paragraph. The range of his own imagination and visions, his power of making situations and experiences concrete, and the recurrence of things indicate definitely the number and intensity of the realizations the reader or listener will experience.

The following analysis of Hawthorne's "The Great Stone Face" will proceed to enumerate the sensings in two classifications and four variations of realizations which any one or more readers may record. Overlapping in these is frequent, and desirable and essential, in good instruction. At first, the pupil may approach the scene and characters of the story with a sense of unwillingness, resistance, and passive curiosity. Suddenly or slowly he may sense the attractive beauty of the landscape, the ease of style and delightful spirit of the author, the charm of the teacher's personality and interest in the tale,—realizations begin to grow, the door opens to a garden rich with spiritual treasures peculiar to a Hawthorne tale.

You may imagine me teaching a class of city boys many of whom have never seen a setting so beautiful as the author describes. I tell them something of my birthplace in the White Mountains, the old homestead, my mother and her beautiful stories that she told me during many watchful hours of the day and night years ago, the mountain panorama that circumscribed our mountain village, the precipitous mountains carved centuries ago and still lying in peaceful vigilance serenely robed in a summer sunset, azure through the haze of a summer sun, and sternly silhouetted in a sublime grandeur against an evening starlit sky. God may have hung out this great face on the mountain side to symbolize that he made great, silent men among the granite hills. At least Daniel Webster said so, and he may have been one of them himself. Here is the story of one even greater than he. Let us read it silently. Interest is aroused, and the class proceeds. We will presume that telepathically I am recording their sensings.

I. From feelings that already existed: (Many of these pupils have visited Franconia Notch and the Great Stone Face.) Familiarity, I seem to have seen such a place; confusion, in recalling the impressions and facts received during the visit; surprise, in finding at last that I have really visited that place; gladness, in the prospect of knowing more about it; satisfaction, on having discovered this story; distraction, in the noise outside the classroom; unfitness of things, reading such a story in the midst of city surroundings; humility, on comparing my own virtue with that of Ernest—(the last three are distracting); curiosity, as to the outcome of the story; unrest, because the story does not move faster (distracting); color, in the background of the story; time, in wondering just when Ernest lived; comradeship, with Ernest as the tale proceeds; personal weakness, as the interest of the story overwhelms me; omnipotence, of God as he moulded nature and human lives; fitness of things, in God's plan of elaborating nature to inspire mankind; glorification, in the marvels of God's work; weakness, of mere man; justice, of God in the promise of rewarding virtue; edification (self); method, of the author; moral, pointed to by the author; power of the spiritual over the material;

usefulness, of the moral elements of life in the development of mankind; magnitude, of the work of God; infinity, of time and eternity; equality, among men; differentiation, among the ideals of men; value, of the spiritual and material possessions of man; toleration, of the ideals and ideas and habits of other people; egotism, of Gathergold, Blood and Thunder, Old Stony Phiz; evolution, in the growth of Ernest's life; and reverence, on seeking the work of God so vividly.

II. Which the teacher and the story developed: Remoteness, happened far away; novelty, in a strange place; height, of great mountains; peace, of silent mountains; love of nature; majesty, of great mountains and the stone face; love of mother, seen in Ernest; inspiration, in Ernest's experience; wonderful, in the work of nature; beauty, in nature and in Ernest's character, earnestness, in Ernest; goodness, of the boy; loneliness, of his environment; superstition, of Ernest and his mother and the citizens of the valley; possibility, of truth in the story; ideals, of the boy; excitement, of the welcomes; selfishness, of Gathergold and the other "great men;" lack of sympathy, in the hearts of the "great men" for mankind; imperiousness, of the military spirit; narrowness, of the politician; mystery, of the poet; expectation, of the fulfillment of prophecy; popularity, of Ernest; appreciation, of good men and good literature; dislike, for undesirable citizens.

REALIZATIONS.

1. Essential—or those which all must get: Seriousness, of the author, of Ernest, and his mother, and the Great Stone Face; sternness, of the Great Stone Face; isolation, of the setting; beauty, of nature and the sylvan verdure; ambition, of Ernest to grow into the likeness and virtue of the Great Face; peace, of the Pemigewasset Valley; expectation, of Ernest and his fellow citizens ; hope, that they would live to see the prophecy fulfilled; constancy, in the work of God with nature; justice, of God in rewarding virtuous living; voice of nature, through the sounds of winds, leaves, trees, rubbing of branches, running of brooks, noises of animals, birds, and insects; superstition, in taking the prophecy seriously; altitude, in the height of the Great Stone Face

above Ernest's house; happiness, of Ernest when the poet revealed to him finally his (Ernest's) identity; excitement, on welcoming the strangers to the village; hospitality, in the warmth of their welcome; joy, in the hearts of the citizens on offering this hospitality; satisfaction, on beholding each newcomer; disappointment, on dismissing each newcomer; material success, on observing Gathergold, Blood and Thunder, and Old Stony Phiz; comparison, among the three prospective likenesses of the Stone Face; doubt, when Ernest beheld them; extravagance, of Gathergold; association, of yellow and selfishness on beholding Gathergold; selfishness, of many business men; insincerity of all three prospective heroes; authority, of the three "great men;" military power, of Battleblast; fame, through wealth, the military, and politics; incompatibility, of Ernest and the three prospective heroes; sincerity, of Ernest; reward for virtue, in the poet's choice of Ernest; truth, in the moral to which the author points; righteousness, of God in rewarding the virtuous.

2. Contributing realizations—or those that come from various outside sources such as irrelevant experience, imagination, attitudes, ideals, environment (not through immediate personal experience), hints from others, etc. Novelty, of the setting; peculiarity, of the boy and his mother who live so far from civilization; freshness, of the forest and earth; beauty, of earth, forest, and sky in contrast; wonder, at the cleverness of the author; prophecy, in the legend; majesty, of the Great Stone Face; unrest, in the heart of the boy; unrest, in the heart of nature; emulation, in Ernest's heart; strength, in the hills; virility, in the Old Man of the Mountain; color, of the foliage and flowers; blackness, of the forests in a notch; gray, of the stone precipices, clouds, and the trousers of Old Stony Phiz; spaciousness, of the valley; familiarity, of the people with the Stone Face; comfort, of the home life of the farmers; time, of the origin of the hills; rushing, of the swollen mountain stream; love of mankind, by Ernest; pensiveness, of the boy; faith, in the fulfillment of the prophecy; kindness, of the expression of the Stone Face; futility of the material, seen in the lives of the three heroes; real love, mother for son; fluency, in

style of author; fitness of author; fitness of things, in the celebration; tenderness, between Ernest and his mother; simplicity, in the life and habits of country people; neighborliness, of the townspeople; serenity, in the Old Man's face; contrast, between the manners of the three apparent heroes and that of the Stone Face; placidity, of nature; doubt, in Ernest's heart; differentiation, between the actual and the ideal in the story; poverty, of the beggars who asked charity of Gathergold; yellow, in fold and complexion of Gathergold; service, of Gathergold's attendants; rumbling, of the wheels of Gathergold's coach; pomp and ceremony, on welcoming the three "great men;" speed, of the dashing horses; death, in the passing of Gathergold; festivity, at the banquet given to Gathergold and his later rivals; antiquity, in the general's chair, formerly Washington's; anxiety, of the crowd and Ernest to hear the great speakers; physical strength, of Battleblast; moral strength, of Ernest; hypocrisy, in the showy spirit of the audience; mystical, in the echoes from the voices of the speakers; imperiousness, of Battleblast; humility, of Ernest; enthusiasm, of the crowd assembled; will power, in the face of Blood and Thunder; endurance, in the Stone Face and that of Blood and Thunder; energy, in Blood and Thunder; wisdom, great in God and small in the three newcomers; gloom, in the mists of the mountain-side; new courage, in the glory and beauty of each rising sun; vocation, in Ernest's calling to the ministry; magnanimity, in Ernest and the Great Stone Face; influence, of Ernest's life upon those of other people; mediocrity, on recalling the lives of the three "great men;" error, in the judgment of the people; accuracy, in the wisdom and judgment of Ernest; eloquence, in the speech of Old Stony Phiz; conceit, among mortals; persuasion, in the words of the three newcomers; music, in their voices, from the band and the echoes; might, in the individuality of Old Stony Phiz; hardness, in the heart and face of Old Stony Phiz; ceremony, in the receptions to the newcomers; grandeur, in the intensity and prolongation of the echoes; contagion, in the spreading attitude towards the three speakers; intrusion, of Ernest's neighbor when Ernest was listening to Old Stony Phiz;

madness, of an unthinkable crowd; fickleness, of such a crowd; old age, in Ernest's personality; radiance, in his face; grace, in his conduct; romance, in the setting of the story; genius, of Ernest and the poet, emotion, of the crowd, the speakers, and Ernest; self-control, of Ernest; respect, for Ernest and the poet; confusion, of the crowd; harmony, between Ernest and the crowd, and in the echoes of voices; sadness, in Ernest's aspect; unworthiness, in the "great men" and the poet; true worth, in Ernest; freedom, in country life; solemnity, of the last occasion; nobility, of the character of Ernest; irresistibility, on hearing Ernest speak; spontaneity, of the poet; divinity, in the fulfillment of the prophecy.

3. Distracting Realizations: Interruption, from the teacher or classmates; loneliness, on recalling how I was once lost in the woods; the unfitness of things, on recalling a silly remark made by a "flapper" when I visited the Great Stone Face; beauty of the setting, returning impressions combine with the pictures of the author to distort present realizations; confusion, from experiences last summer contrasting with present impressions; weariness, because the story moves too slowly; impatience, because Ernest believes in prophecies; allegory, on recalling a similar story; failure, those circumstances attending Gathergold's experience much like my uncle's; comparison, Blood and Thunder reminds me of Benedict Arnold; old Stony Phiz of Daniel Webster, the poetry of Emerson; curiosity, at the meaning of a new word; inquisition, if the teacher has ever been on the Great Stone Face; doubt, that natural rock formation could resemble an old man's face; play, good fishing up there; height, could anybody scale that precipice?—distrust, of pickpockets in the crowd of auditors; hunger, aroused by the picture of the banquet.

4. Realizations That Can Be Developed Only Through Immediate Personal Experience: Appreciation, of sunrise or sunset in the White Mountains, of Ernest, only through sitting in the presence of a great man; true happiness, coming as the by-product of work well done; real self-satisfaction, the result of giving to others in full measure of one's ability to give; spirit of

the hills, by living among them in all sorts of seasons and weather with their own people who love them in silence, and echo their love of mankind in their daily way of life; furthermore, in inspiration coming from nature in various ways, on listening to the echoes of the bugle in the mountains; richness of life, from an evening or a camping trip sleeping around open fires with boys of Ernest's type; poverty, only by being stricken penniless and friendless oneself; thrill, only by being strong and eloquent in one's own conviction, and moving a crowd to action; power of God, on being saved from death, witnessing the sparing of another's life, or having a prayer definitely answered; real magnanimity, by doing, or receiving the fruits of, a most generous act; true success, by having one's own life become a blessing to others.

I must not infer that all or most of the above sensings and realizations may come to any single or several young readers of "The Great Stone Face." A teacher who has lived many years under the strong influence of the benign aspect of the Old Man of the Mountain, among his own people, enjoying still the spirit of the hills, nestling in his heart and soul the silence of the great North, echoing the true ring of the rugged forest in his speech, and flashing in memory the beauty of his boyhood environment, can prepare the minds of his pupils for a golden experience with this story. After they read it, the pupils will do most of the talking. If rich and varied and contributing impressions are given in full measure before the reading is begun, why not leave them afterwards to their own individual impressions and reflection, for we know that

> "They have heard whispers from the mountain's heart,
> And life henceforth is nobler."

Freedom in Education

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THERE are cogent reasons why the concepts of freedom and education should always be associated. Freedom is one of the most noble ideas that we have, and to connect any activity with it is to raise that activity to the worth of the idea. Freedom is vitally connected with all human interests. Just now, the theory of evolution is the object of a rather general popular attack. The reason seems to be a fear that human consciousness is robbed of its freedom if the development of human life has a natural explanation, or is related without break in the series of development to low forms of life.

But no person need fear to examine the evidence of his natural development. The mind that can trace such stages of its own history, that can run its thought back and forth over the vast periods of growth and formulate developmental laws, such as adaptation to environment, variation, or the survival of the fittest, —that mind by the very act emancipates itself from the process. The act may be compared to a person marching in a great procession; he can, at will, step outside and review it. The procession is of much interest to him, but there is more to him than the procession.

Freedom is vitality related to all social activity. Business is based upon voluntary contract. Legal penalties are seasonable only because of the assumption that the wrongdoer has the ability to choose another course of action. The sense of responsibility, so important in all high-minded action, is due to the feeling that responsibility can be avoided. There is no real moral action without freedom.

Determinists, to be sure, produce able arguments, which prove, at least, that freedom of choice is not the simple problem that it

appears to be without reflection. It might be said that education does not have to deal with the subtleties of freedom, but has only to take people as they are and go on with its pedagogy. Dr. G. S. Hall has said that it would be wise to teach religion, even if the vitality of the religious ideas were to decay, because pedagogy "need have nothing to say respecting the absolute truth or falsity of these ideas." Still, in time, enthusiasm for developing moral actions and religious sentiments would wane, if belief became certain that morality is a dream and God a shadow.

But we do not need to have such doubts; doubters have only partly thought out the problem. Bergson has given reasons enough to indicate that psychology and evolution need not destroy one's belief in real choice and true freedom of the will. In Kant's Metaphysic of Morals is the profound remark that "every being that cannot act except under the idea of freedom is just for that reason . . . really free." Then follows the statement that every rational being with a will "acts entirely under this idea" of freedom. In any case one may fall back upon the pragmatist's method of reasoning and say that belief in freedom is sound because it has produced results—results in character and in civilization.

Freedom has a vital relation to the highest thoughts and ideals of which man is capable, his religion and philosophy. It will be sufficient here to recall the familiar words of Kant's that philosophy has to do with God, freedom, and immortality.

There is another kind of reason why freedom should be associated with our education: freedom has from the first been inseparably connected with our national life. The history of our country can be written around the theme of freedom. Consider how much history is comprehended in such a list of topics as the following: religious freedom, political independence, freedom in international trade, emancipation, industrial freedom, the open door, free land. It was in the course of things that some one should give us the exclamation, "Give me liberty or give me death." The principle of freedom as well as of equality naturally found a place in the Declaration of Independence, and our fundamental law, as a matter of sincerity, declares that one of the purposes of the Constitution is to preserve the blessings of liberty.

The problems connected with freedom of action and the preservation of freedom are different in the twentieth century from what they were in the seventeenth, eighteenth, and nineteenth centuries. The most important physical reason for this is the fact that the American frontier has gone. A Williams or a Hooker, when holding disputed opinions, cannot move on and found new states; dissatisfied farmers cannot leave the tidewater and go toward the hills; "Western youths" cannot with the former facility go "conquering, holding, daring, venturing" into the "unknown ways," when conditions arouse restlessness. The tide of migration has reached the shores of the greatest ocean and the undercurrent now flows eastward.

When dissatisfaction and restraint are burdensome, nervous energy is not exploded in wild and open lands, but the outbreak occurs in the old, settled places. Strikes are in the midst of us and are felt by all. The "crime wave" does not break on the edge of civilization but over crowded cities. At the same time, conditions are so complex that remedies are difficult to find; legislators are often hesitant and public opinion indecisive and bewildered.

Nature has been good to us in the past; but now some way must be found to take the place of nature, if we are to keep our free institutions and preserve in the individual the free, indomitable spirit that is our birthright. The country can long remain powerful, can long be a leader among the nations, but the United States of America will have reached its apogee whenever—may it be never—its citizens are willing to barter freedom for anything, whether it be comfort, pleasure, or even life.

It is the function of education to supply what nature does not give. Education does not furnish vocal cords, brains, or hands, but it does help in the development of language, the acquirement of comprehensive thoughts, and the fabrication of useful and beautiful objects. Education must assume its share of the large and patriotic function of taking the place of the frontier in developing and preserving our national characteristic of freedom. Here is a motive for education that is comprehensive and which may arouse the zeal of educators.

But can education accept the task? When the country most needs help in upholding its high spirit of freedom, is the educational system sure to be found ready? If the country is in danger of losing its virility, will not the institutions of the country be likely to show signs of lessened vigor? This is not a pessimistic paper, but every institution that would teach freedom must aim to be fully free itself. Our educative system should be examined to see whether it lacks freedom in any particular.

For example, our public education is compulsory. Can compulsory education teach freedom? Freedom and compulsion are contradictory terms; the spirit of the two are exclusive. Can compulsion take a child to the door of a schoolhouse and leave him there? Don't think that this is a play on the words, compulsion and freedom. The logic of every situation will work itself out, unless the logic is forestalled. Is it to be thought that every school in the country, when a child approaches accompanied by its natural associate of freedom, admits both the child and the companion?

Again, education is now on a large scale and the machinery of administration has been enlarged along with the number of learners. Once education was locally controlled, but since the time of Horace Mann the state has more and more managed all the educational affairs within its limits. But extensive administration always tends to externality, rigid rules, authority, and dictation. These are foes of freedom. Yet we must have administration. There is a growing tendency to allow within the school system more initiative and influence to the class-room teacher. This is in opposition to the administrative tendency and is a good sign.

Similarly, there is a proposition to make our educational system much more under the control of the national government. Some people fear that the passage of the contemplated act would in time make the states subservient in a national system, much as the local districts have become. Friends of the new movement declare that such results would not eventuate. It is well, however, that the issue has been raised.

As to the higher educational institutions, there is a somewhat vigorous attempt to curtail the scientific freedom of colleges and universities by legislative enactment. If the legislative, executive, and judicial departments of our government should be separated, certainly the legislatures should be kept out of science. Some years ago, Senator Lodge gave an address in which his facts were at variance with the historical pride of the locality. Some interested politicians proposed that the issue be taken before the next Massachusetts legislature for settlement—by majority vote. The testing of scientific theories and the determination of purely historical facts are not legislative functions. There must be "eternal vigilance" within all parts of the educational system to preserve its freedam. For, let it be repeated, to teach freedom an institution must be alive with freedom.

The pedagogy of the theme should not be overlooked. Let us briefly consider more analytically the nature of freedom with reference to how it should be taught. When Aristotle organized his ethical system, he studied the acts of good men to learn the nature of goodness. So may it be done in the case of freedom: how do free persons act? First, and negatively, they do not bemoan the obvious fact that they are not wholly free; for, this latter is impossible. To be wholly free would mean to be without conditions, and nothing finite can escape being conditioned. We are conditioned by space and time, our minds are limited by our bodies, we are conditioned by our physical and social environment, our past has entered into character, which aids or hinders in new undertakings.

Our pedagogy will start from this negative position of non-freedom, but it will quickly lead a long distance into positive freedom. Those who try to act as if there were no conditions are the lawless ones, who finally discover that both nature and society are arrayed against them, or they are the weak ones, who merely kick against the pricks. Intelligent finite freedom begins with admitting conditions and, moreover, going in search of them instead of ignoring them. But to know a limitation is greatly to be independent of it. To know that perpetual motion is impossible

is to free one from the fruitless task of trying to attain it. Since the time of Bacon, the modern world has made progress largely by this method. This is the accepted method of experimental science—to condition a problem by isolating it and then to assemble for investigation all the conditions relating to the problem. When all the conditions are known, the problem is conquered, the scientist has free control over it.

But the same method has been employed in every other successful undertaking: the industrial revolution, national and international advances, business achievements, have been great in proportion as they have mastered the conditions that could be controlled but not ignored. Compare the incantations of a medicine man, who shuts his eyes, so to speak, to all conditions, and the highly intelligent acts of a Pasteur, who seeks the minutest conditions. For finite beings, conditions are the tools for the use of freedom, not fetters to enslave.

But in our present civilization, it must be noticed as a condition for our thought, people are far from happy and their outlook for the future, in many parts of the world, is discouraging. The reason is that our age is interested in nature more than in man. We have gone a long way in conquering the conditions imposed by physical nature, but we have not included in our problem a factor more important than nature—mankind. If the terrible conditions of to-day are to have their due effect upon education, all social studies will be much more emphasized. When mankind is included in every problem, along with all other conditions, a civilization will result which will be happy as well as marvellous.

The bearing of these thoughts upon education may be put into this maxim: teach the learner in all stages of the educative process to take time to consider the conditions of every problem, and to include mankind as a constant condition in them all. By this maxim not only methods of instruction may be tested but, also, all problems of discipline, especially the conduct of pupils when in the presence of others. If they are required, for instance, to hold themselves in restrain by rules used in school, not in life, they are not trained to master social conditions, which, we have seen, are

the most important conditions that must be taken into consideration.

In conclusion, to show the possibilities of teaching freedom in this way, consider some implications of such free action. The process is this: the free actor gathers up into a single survey the numerous conditions of his problem. When this is done, he has a command of the situation that we can behold with wonder. How the mind acts when conditions have been thus conquered is not known. But the mind has a comprehensive glance over the whole; it has a kind of insight "*totum simul*," an insight all at once, which is the eternal type of consciousness, a definition accepted by both James and Royce. Such thinking lifts man toward the eternal realm, and it is no wonder that great things have resulted on earth through the method of experimental science.

Evolutionists' scares and determinists' arguments look small when we consider what man really is in his freedom. And the function of education is shown to have a limitless significance when finite beings are guided to control temporal conditions in cooperation with other human beings. Education in the spirit of freedom looks beyond the world of time and space into eternity.

The Subject Matter of Introductory Science and Its Organization

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THE choice of subject matter of a course in introductory science must be determined by its aims and purposes, and be so controlled that it may best supply the most efficient educational means for teachers and pupils. The greatest difficulty lies in its organization; there is no lack of material, for the field of introductory science is the universe and all therein; its laboratory, the earth; its recitation, life itself.

1. Bases for the Choice of Content.

The subject matter of introductory science should be general in its nature and not limited by the man-made boundaries of any one branch of science. Much of the value of the introductory course depends upon the fact that on account of its general nature it can, and does, reach every child in some particular, interest him in this, and start him on the main road of achievement. Such a course should begin, and continue, with those facts, truths and principles which affect the pupil to a very great extent in his everyday life. "Mathematics and science should find a center for their work in the life and environment of the child, for here the objective material is found upon which the entire instruction is based."[1] It necessarily follows that if the environment of the child is to be the source of material, the latter must consist of common things and ordinary phenomena. Likewise,, the emphasis should be placed upon the descriptive and qualitative consideration of these things and phenomena rather than upon their quantitative determination. "What we need is a quality of knowledge which shall

1. Rein, W. Outlines of Pedagogics, p. 161.

be alive and set the child's face right toward the universe, and thus form the foundation for active, helpful living."[2]

2. The Organization of an Introductory Science Course.

The plan of a course will determine to a great extent the value of the results which will be derived from it. Holmes wrote to the effect that it does not matter so much where you are, as where you are headed; thus the course should be so organized as to lead in *some* definite direction. This direction should naturally be according to the ideals and purposes of the course. While introductory science must be general in its nature and not specialized, it must not be indefinite or indeterminate.

In many schools the immediate predecessor of introductory science was physical geography, and the transition was easy, since physical geography contains so much material of a general scientific quality. Nevertheless, if introductory science is to function effectively it must not be limited in its development by the requirements of a study of physical geography alone; introductory science should embrace all of the elementary principles of physical geography—and much more. There are many facts and principles which have a fundamental and profound effect upon a child's life which can not be treated from the viewpoint of physical geography.

While physical geography was the first science to be taken as the guiding principle for a course in introductory science, there have arisen advocates for many other sciences which may be used in a similar manner and for a little purpose. Thus biology, physiology, agriculture, and even physics and chemistry, have been offered as guides. It is this very prevalent opinion that any science may be the guide for a course in introductory science that defeats the advocates of any *one* of the sciences. The reason why any branch of science may seem, to one who knows it as a specialist, to be the best approach to a study of introductory science is because the latter, being general in its content and ideals, may be approached from all viewpoints. Yet it does not follow that any specialized science affords the best solution of the problem of

2. Hodge, C. F. Foundations of Nature Study, Pedagogical Seminary, Vol. VII, No. 2.

organization. Since the course is to be planned for the good of the child, and not for the satisfaction of the scientist, his interests and needs must be kept in mind.

3. Interest as a Factor in Organization.

If the subject matter of a course in introductory science is so arranged that just as interest lags a new interest may be aroused, the attention of the pupil may be held, to his great and lasting advantage. Interest begets interest, and the ability to become interested in matters not previously attractive is one of the desired results of education. It is not the province of introductory science to amuse, and thus hold the interest through a sort of mental bribery; its object is to make the pupil in unity with it, to cause him to build within himself a sympathetic kinship with the subject matter in which he is receiving instruction.

There are two centers of interest which may govern the organization of the subject matter: Geocentric and anthropocentric. In the first the immediate surroundings form the materials of subject matter, and, with enlarging spirals, such a selection may be made as will include all knowledge. In the second the individual, rather than the place he occupies, is the center and the procedure is more personal, and thus more interesting to the child. The actual subject matter may be nearly the same in content whichever center is taken, and, since the child is the one to be considered, the choice of the child as the center of interest is more to be desired. The order of the subject matter should be such that it will fall naturally into ever-widening circles, leading farther and farther from the central self. In this respect introductory science may exercise a strong civilizing influence, since it leads the child out of himself to a growing appreciation of the universe. "The child must be civilized, and as we have said again and again, the essence of civilization is that remote and not immediate ends govern conduct."[3]

3. Bagley, W. C. The Educative Process, p. 109.

4. Organization from the Viewpoint of Various Needs.

The subject matter may be arranged in such a manner that it will consider the needs of a plant, or of an animal, or of a child. Again, the study may be directed toward the satisfaction of a particular need, or of a series of needs. Finally, a larger viewpoint may be chosen, and the course developed along the lines of civic needs.

The great objection to the use of the needs of a plant as the organizing factor is that a plant can have only biological needs; the child who is being educated could learn nothing concerning his psychological and sociological requirements. If the purpose of introductory science is to teach physiology, it may well have the needs of a plant as a guiding principle; if it is to fit the pupil for *living*, in the complete sense, then such a method would fall far short of its purpose. What is true of a course founded upon the needs of a plant is equally true of one based upon the needs of an animal, although the latter plan would bring the subject matter somewhat closer to the child. Since the child is the one to be considered, his point of view should be valuable as a guide.

The weight of evidence is strongly in favor of considering the child as the center of the course, and indicates that the best organization will be controlled by his needs, physical, physiological, psychological and social. Further, that the consideration of these needs should start with the immediate environment, gradually extending this until it embraces man's dependence upon man—his civic needs. "It is usually assumed that one purpose of the course in science is to enable the pupil to adjust himself more exactly to his environment."[4] This conclusion does not indicate that because the individual should be the center of the course, physiology should be the starting point, any more than that psychology should be given in the first year of the grades, in order that the six-year-old may learn to study.

5. The "Project" Method.

Following the plan that education should be based upon the

4. Eikenberry, W. L. The General-Science Course in the University High School, The School Review, Vol. XX, No. 4.

satisfaction of some *felt* need, or upon the solution of some difficulty, the project method has developed. That the meaning of "projects" is not clear to many educators is evidenced by the fact that the advocates of the method have spent considerable time and effort in attempting to explain in what respects their plan differs from the objectives of a well-taught science course. "A *project* differs from a *topic* in that (1) a project originates in some pupil's question, and not in an adult's logical sequence of ideas. Its implications need not, therefore, be confined like a topic to any of the arbitrary divisions of science, such as physics, biology, etc., which have been devised for the intellectual convenience of adults. (2) The project involves the active and motivated participation of the pupils in carrying it out. (3) The project never ends in a complete, final, or absolutely finished conclusion."[5] "Every real problem or project in science, then, must originate from a perplexity, the solution of which is felt to be necessary for the satisfaction of a personal need. This need may arise in the natural course of experience or it may be presented by the teacher directly or indirectly through excursion, lecture, or reading: what is absolutely necessary is that it may be comprehended, approved, and adopted by the pupil as his own."[6] "In a word they are to learn to do things they should be doing and will do in the future by doing those things now, not by doing something else or by letting another provide the thinking necessary for them."[7]

Whether the project method is one solution of the question in regard to organization, or is, after all, but a method of presentation must be decided by the teachers of introductory science. All skillful teachers of science continually draw upon the home and life experiences of the pupils, as well as giving them practical applications of the science being studied, and also set up artificial problems in order that the pupils may have the opportunity of

5. Woodhull, J. F., Chairman. Some Fundamental Principles, Formulated by the Committee on General Science of the N. E. A.

6. Briggs, T. H. General Science in Secondary Schools, Teachers College Record, Vol. XVII, No. 1.

7. Hosic, J. F. The Present Status of the Project Method, The Journal of the National Education Association, Vol. XI, No. 10.

exercising their ability of directed thinking. The appeal is always made to the child and according to his point of view. In the making of apparatus, in the performing of experiments, both in the home and at school, when accomplished under proper conditions, the natural interest shows forth. The local conditions are emphasized in every good science course, and attention is called to the means by which these conditions may be improved.

A well-taught science course should offer projects as means of summing up, or putting into effect knowledge already acquired for the purpose of accomplishing a definite and desired end. As usually advocated, the project method seems to lean toward the accomplishment of a series of ends, rather than the acquisition of a body of knowledge by means of which a large number of ends may be easily attained. The tendency is toward training and not toward the development of general and fundamental principles upon which all knowledge must rest. While training and education form a natural partnership in the well-rounded development of the child, the difference between the two must always be kept in mind—the trained man can never do more than that in which he has received his training; the educated man has no limitations. The great danger of the project method lies in the tendency to raise the method to the dignity of an objective.

6. The Method of the Development of the Course.

When the purpose of introductory science is remembered—to give information, satisfy some need or needs, and to develop an adjustment with the environment—there can be no doubt that the method of presentation should be according to the way in which the child thinks. The teacher must put himself in the position of the child, he must remember how he felt as a child, and he must have a continuing sympathy with the activity of a child's mind. It is impossible to state a hard and fast method of development; naturally, since one of the most important advantages of the course is that it gives opportunities for increasing the ability of better thinking, the method of development will change as the course continues. A few dangers may be avoided and disappointments

prevented by treating the introductory course more as an introduction to science, and to the scientific attitude of mind, than as science itself, although none of the advantages of the scientific instruction need be sacrificed on this account. To the contrary, the changing of miscellaneous and wandering fancies to homogeneous and directed thoughts *is* scientific education.

One of the supposed prime requisites of a course in any of the specialized sciences, according to the method pursued in most instances, is that its study should be according to logical sequence. While many of these sciences are presented in a manner which is far from logical, according to the best authorities in logic, nevertheless the logic is constantly emphasized. This emphasis has, more than any other factor, made science in the schools distasteful to the pupils. As has been said elsewhere,[8] and still strongly believed, "The sciences themselves have been taught in a logical manner. It might be well to ask from whose standpoint a science is taught logically; from the pupil's or the teacher's? I believe that sciences have been too logical; there has been too little attention paid to "natural sequence" and too little consideration paid to the wishes of the pupils, who can recognize no "logical sequence" until they have passed on and can review the subject as a whole." That science does not stand alone in this respect is evident from the following: "*The logical from the viewpoint of subject matter represents the goal, the last term of training, not the point of departure.* . . . In truth, the mind at every stage of development has its own logic. . . . the *psychological* and the *logical* instead of being opposed to each other (or even independent of each other), are connected *as the earlier and the later stages in one continuous process of normal growth.*"[9]

If the psychological method of development is to be desired in the presentation of all subjects, science, especially, should be so adjusted to the needs of the child as to make the strongest possible appeal to his developing mind, and to offer the most satisfying

8. Rowell, P. E. Elementary Science for High Schools, in National Education Association. Journal of Proceedings and Addresses, 1911, p. 951.

9. Dewey, J. How We Think, p. 62.

answers to his all embracing, but natural, curiosity. The scientific method, in its truest sense, has won for itself the highest place in the estimation of educators; for that very reason the teachers entrusted with the introductory science course should develop it according to the psychological demands of the child, to the end that he may acquire the logical—the truly scientific attitude of mind.

The Grass

(From "Praise-Songs")

The green decks the open drawing-room of Nature,
The carpet whereon freemen have ever danced!
Sturdy streams from the ancient soil,
Rivers of verdure vying with the blue ocean,
Upspringing in God's praise, a perfect song of praise!
Rich velvet are grassy slopes dreaming in the low sun,
The broad reaches of the smooth lawn, where bright blossoms lie empillowed, fresh jewels on Nature's vivid dress!
I brood upon it as we pass the churchyard, the breathing, undying grass — graves o'ergrown with grass, how it softens them! lovely covering for the dead, waking the hope of life.

Meandering hills of spring, blued by the distance, above which swooning clouds faintly blush,
Fields where the violet wakes, the buttercup glows; where, beside the plashy brook the purple iris blooms in her perfection,—yet what were these color-solos without their attendant harmony, the choral praise-song of the grass?
The kine lift their heads, grateful for the succulent stems they crop:
The midsummer grass mown in the fields sends forth a benediction of fragrance, the spirits of the heal-all herbs.
Drifts from salt meadows, the odor of the nuptials of the sea and the grass, stirring heart-memories, hope for the beauty of the coming years.
O praise God for the grass, His mantle of grace flung lightly over the earth!

HELEN CARY CHADWICK.

Textbook Democracy

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"CERTAINLY there were no such attractive textbooks published when I was in school." This is the remark most frequently heard these days at exhibits of high school literature. At first sight the attractiveness of the twentieth century text seems to lie in its bright-lettered cover, its abundant pictures, and its clear-faced page. But to tell the truth, the real charm lies rather in the material than in the form, attractive though that may be. In the handling of material these new textbooks bear frank testimony to the educational democracy of our day.

Time was when the high school course was for the few elect, endowed by nature with brains, money, or educated parents. Now the high school course is reaching out for all with a gift for every kind of seeker. The new text-books are as they are, because of a clear recognition of this sweeping democracy in education.

The new high school textbook, whether in Latin, in geometry, in history, or in what not, presumes, and very wisely, that the student is only an average youth, one of America's millions, and not a budding young intellectual. It presumes that his thoughts are prone to wander from the straight and narrow path of reason and therefore need frequent topic headings as sign posts, and thought questions as eye openers along the tortuous way. It also presumes that long, unbroken paragraphs repel him. Pictures are no longer supposed to be clear and meaningful by themselves, and so the author adds a full explanation of them. When a definition is introduced (a definition, you must understand, is a veritable *bête noir* on the pathway of the mysteries), it is introduced with meticulous care, illustrated in a dozen different ways, and then drilled in by case upon case for exercise.

Surely Latin and algebra must have lost their terrors for the beginner these days, judging from the new books. Who would have thought that the *gradus ad Parnassum* could be made so easy? Ancient history reads like fiction, now that so many dates, hard names, and constitutional details have been relegated to the discard. Geometry seems like a cross between handwork and review algebra, savored with a touch of reasoning. Thus has the course of the intellectual mysteries been cleared for Everyboy (and his sister).

The new high school textbook shows its democratic leaning also in its recognition of the fact that Everyboy is sure to ask this question of his teacher, "Of what use is this study?" If a boy cannot see the use of it, he feels as though he had no time for it, since life is very full and Everyboy must get to real work as soon as possible. The aristocratic may have time to dream over interesting and refining luxuries of thought, but this American boy of ours is headed straight for the realities of life, and so he insists upon learning only those things for which he is sure to find a use.

The new textbooks strive zealously, sometimes almost painfully, to show the practical use that can be made of ideas. Of course no author ventures to show the use of everything he sees fit to teach, but at least he suggests uses at intervals so frequent that Everyboy gets the comfortable reaction that this subject is really fitting him for life. Some people think that these applications are inserted merely to arouse interest. You talk with your schoolboy and you will find a deeper reason. He simply resents what he cannot see a use for. That is why the new Latin books bristle with derivations, and the geometries with flagpoles and linoleum patterns. That is why French books introduce conversation in the first lesson. Young America demands essentials; even though he knows so little about his future needs.

Another confession which appears in the new texts is that of life and death competition. Everyboy has been brought up on the attractive juvenile literature provided in Democracy's public libraries, and has drunk deeply of the joy of being entertained by books. Why should not his school books entertain him too? He

has poured over tales of adventure and travel until he was completely lost in the past. He half expects history to hold him spellbound in the same way. He has played with batteries, a wireless apparatus on the roof, and the family flivver. Quite naturally he expects high school physics to be at least as interesting as these things. He has learned from the gramophone, the movie screen, and the elementary school with a minimum of effort and a maximum of entertainment. He expects to be drawn to his high school work by a similar magnetic pull.

It is not enough that the new books follow Matthew Arnold's requirement of clearness, brevity, proportion, and sobriety. They must also 'put it across,' whatever may be the technical term for that very important function. Everyboy is willing to do anything interesting that the author suggests, but he simply cannot stand being bored. He demands a high tension of interest from beginning to end, and such adornment of interest and variety is being added as fast as authors can work out devices. But it is hard to keep up wth the demand, especially for those of the older generation who were not brought up on such highly seasoned food.

Most curious of all is the open confession in the new textbooks that Everyboy's teacher will probably be an amateur teacher without much training for that particular subject; in other words, that the teacher will be, like the student, one of Democracy's own products. Time was when the textbook presumed a specialist who would add the enthusiasm of accumulated knowledge to supplement the condensed manual. Now we might as well frankly admit that the majority of our high school teachers are novices blessed with the enthusiasm of youth rather than of knowledge, and that they will teach subjects for which they have had a little special training. The fact is, they need textbooks which will not make too heavy a demand upon either time or knowledge, and so the kindly master behind the textbook has become the super-teacher who makes up for the amateurness of the teacher.

The old professor in his class used to add (now really did he?) many interesting facts about Euclid, Archimedes, and Descartes. The new textbook in geometry does not distress the teacher by leav-

ing it to him to review the history of mathematics, but simply prints a full and interesting account of each important geometrician, advertising the subject by an attractive picture. What a relief this must be to three-fourths of the teachers of geometry in democratic America!

But for all these changes in textbooks, the real task of making Everyboy's books has hardly been touched yet. Beneath the problem of how to interest him, how to keep him at work, how to make him educate himself against the textbook, lies the deeper problem of finding out what he really ought to learn. The super-teachers are wrestling with the matter of writing books for the few and for the many, all thrown together into the same school and even into the same class. They must write history for those who are to lead and those who are to follow. They must write mathematics for those who will become engineers and those who will become clerks. They must write civics for boys and for girls. I say that the super-teachers who are working out these problems are true statesmen. They are developing a type of education which will make the people fit for the ballot, a free press, and a margin of leisure time.

Mollycoddling in the Teaching of Written Composition

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TEACHING children to write sentences correctly is generally regarded as commonplace. Not only do the public and teachers of other subjects regard it as commonplace, but many who presumably are English teachers look upon it as work of infinite boredom,—as uninteresting as washing dishes and sweeping floors. Then let us floor sweepers and dish-washers look up a moment from our task and survey our fellow workers. Let us rest a moment on our broom handles and just talk among ourselves. How came some of us to be sweeping floors and washing dishes in the English department instead of in the history, or mathematics, or science department?

Some one confesses with candor worthy of a nobler cause, "Well, I chose English because I didn't know enough about anything else when I got out of school." Another, with equal frankness, "Well, I chose it because I thought it was the easiest subject in the curriculum."

But some do not get the opportunity to speak, for just then a group of superintendents and principals passes by, and one, being caught by the spirit of honest confession, says: "I admit I always select my science, manual training, or mathematics teachers with more discrimination than I do my English teachers; there seem reasons for it." And another adds: "Well, I too, am guilty; when I can, I put my doubtful teachers into English departments, for I feel that a failure there will do less harm and be less conspicuous than elsewhere."

It is remarkable how few people realize the complexity of English as a subject to teach; or what changes have come about in the subject since its introduction into the curriculum not so

many years ago; or what changes are taking place in the subject all the time. In its present state of organization the English teacher is supposed to teach the children to know fairly well the great literary leaders, to enjoy books, and to be able to employ fair discrimination in selecting them. Then she must teach them to write acceptably. This means she must teach them form, spelling, capitalization, punctuation and paragraphing. The simplest letter involves a knowledge of all these. Then, if the athletic association needs new sweaters, or the parents-teachers' association buys a new victrola, or the chapel needs more pictures, the English teacher must give a play. This does not include such small duties as serving as secretary to this and that, or writing up the entertainments for the local press, or coaching the debating team, or supervising various essay contests and commencement exercises. And yet we are going to put her on the carpet for mollycoddling. She deserves it. For paradoxical as it may seem, the busier a teacher is the less excuse she has for mollycoddling.

Day after day, or as often as composition papers are handed in, the English teacher takes them and patiently red-inks the same old mistakes of "dosen't," "it's," "buisness," and numerous others of their associates. Here and there she indicates the need of a paragraph indentation; here is a plebeian noun running off with a capital, leaving some proper noun shamelessly bareheaded. Some sentences run blindly into others, while some lag along behind, only half-dressed. Finally, although in doubt as to what the grade should be, she puts down a C or a C minus on the strength of the subject-matter or the general appearance of the paper, and returns the themes the next day, only to make another assignment that will bring in more papers which will have the same old mistakes, not daunted by their red ink insult of the day before.

Certainly those same errors appear again! What is the use of going to the dictionary to make sure of the spelling of a word, or of bothering one's pate over such trifles as capital letters and punctuation; nobody but grown folk cares particularly about those

little things. They are not important, anyway, for teacher never "takes off" much for them.

Teacher is "taking off" for them, but not enough; not enough to prevent their frequent appearance. Instead, she struggles with them day after day, till at last she loses faith in her ability to conquer them and lapses into the kind of teacher that makes too free use of the waste-basket.

The teacher who imagines that by indicating the same errors day after day she is teaching written composition, is laboring under a harassing delusion,—harassing because, in spite of the fact that she is working to the last ounce of her strength, the class seem to be getting nowhere. Unfair as the statement may seem, the fault is all the teacher's. The average child is not going to do any more school work than he has to. If he is not made to realize, and realize keenly, the importance of correct spelling, form, paragraphing, and punctuation, he is not going to learn about them if he can get out of it. The teacher who red-inks day after day the well-known errors in these essentials, is not only expending futile energy, but she is providing the opportunity for her pupils to form lasting habits of slovenliness in writing. She needs to have the children expend some of the energy she is expending.

Sometimes it takes Old Man Desperation to pull us out of ruts. After several years' futile struggle against the errors so common in children's written work, I waked up to the fact that I had been working on the mistakes as such, instead of on them through the children; that I had been doing most of the work myself and had left very little for the children. In short, I had been molly-coddling them.

I was standing at the front door of a nine-months' term, and looking down a vista paved with loose-leaf theme books, every one of which I would have to turn leaf by leaf and read line by line without hope of the novelty of encountering a new kind of mistake. Suddenly it occurred to me that if I could make the children see that drab-colored vision they might be able to do something about it. I determined to try. So, beginning with my first class,

which happened to be ninth grade, I led them out in an informal discussion of the kind of mistakes boys and girls of their ages usually make in their written compositions. They knew all about it, from the simple matter of form.—through negligent indentation, careless spelling, indifferent punctuation, and haphazard capitalization.

I was rewarded by the frankest kind of confessions about their views concerning English in general, and written composition in particular. They usually prepared their English lesson last, and the themes always at the last minute. One could always manage to "get by" in English. Oh, yes, they always knew when they guessed at the spelling of a word. No, they never consulted a dictionary about it; the teacher simply marked the word if it were wrong. Oh, yes, capitals were easy enough if one stopped to think. They didn't bother much about the punctuation; people weren't expected to know that till they were grown. Anyway, that was something to do pretty much as one pleased. No use to bother yet awhile—the teacher gave that in special lessons. Oh, probably they could do better, but it would take a lot of time. One didn't have to know all that in order to "pass."

Their new theme books lay on the desks before them; they were receiving the usual preliminary instructions concerning theme-book rules and regulations. I remarked about the crispness and newness of the books, and regretted aloud that I would have to mar them with red ink. I wondered if it would be possible to go just one term—six weeks—without having to use red ink on the four "juvenile" errors, as I casually termed it. Of course, I had to explain that I meant such things as form, spelling, capitals and punctuation, as far as they were supposed to know. At first they didn't know, but when I reminded them about the shortness of a term, that made a difference; it might be possible. They would like to try it. I then promised them that I would do my part toward helping by not making any assignment that would require over one paragraph of eight or ten sentences. Oh, then! That would be easy; they knew they could make one paragraph correct in four points. They were enthusiastic.

We were to try it one term, with the understanding that if it worked so that they could see an improvement, we would continue it throughout the year with such modifications as we found necessary. The plan was then: no assignment was to be over one paragraph in length; they were to observe the conventional form, which was quite simple; they were to see that every word in the paragraph was correctly spelled; the paragraph was to be indented; no common word was to wear a capital unless it stood on duty at the door of a sentence; they were to use no mark of punctuation they could not give a reason for, and where they did not know a reason or find it out, they were not to use any mark. This was to break the comma habit.

We then worked out a plan for grading; rewards and penalties add zest to any game. A theme free from any of the four "juvenile errors" was to be scored A, regardless of other possible faults; and any theme containing as many as one of the errors was to be scored D, for it told of indolence. The child, however, by re-writing the theme and correcting the error could remove the low mark and get his A.

Strangely enough the boys seemed as much interested as the girls. Taking advantage of their co-operative attitude, I wondered aloud about how far back into the grades such a plan (modified, of course, to suit the conditions) would work. In their mood of "awareness" of the inseparableness of certain mechanics from even the shortest possible paragraph, one boy—the largest in the class—said, "As far back as the children are asked to *hand in* written work." I had not expected as much. And although coming from a pupil, it is an answer that is charged with meaning.

To be brief, we began our plan that day and continued it throughout the year. There was no mollycoddling about it; the careless were penalized according to agreement. The ones not spurred along by pride in achievement did their best in fear of the extra work. It took courage and persistence to carry out the plan, for the element of human nature is always to be reckoned with in the carrying out of any method. We had many fall by

the way, but in the main we moved together toward a common goal—Accuracy. It reduced unbelievably my red-inking; and incidentally, the matter of written composition rose several degrees in point of caste! Of one thing I am sure: we made noticeable advancement in breaking some well-established habits of carelessness in writing.

My talks with children in groups, and my study of their point of view in regard to English, have convinced me that children are aware of the fact that we teachers mollycoddle them. In their sleeves, they smile at us. Certainly they later reproach us! Experience which comes to the ones who go to college, and to those who enter business offices as stenographers, reveals to them that their English courses—most of them—furnished rather good training in carelessness.

It is far back in the grades that children get their impression of what constitutes written composition; back where they are asked to write so much. Where a child is not made to realize that a sentence written has some important differences from the same sentence spoken, the result is obvious: merely words—no mechanics. Some teachers fail to make this difference clear to the children from a sheer confusion of values. Have you ever visited a primary or elementary teacher and heard comments like the following: "That paper looks nice, Mary." Perhaps she holds it up for the others to see, with the remark, "Class, look at Mary's work; isn't it beautifully written? I couldn't do better myself. John, John! that looks awful. Such writing You will have to do that work over."

Penmanship, you see; not composition at all. Oh, no, she didn't intend it that way, but the children get it that way. John probably hates to write anyway, and somehow he soon gets the idea that composition and penmanship are one and the same. Before long he is boasting that he hates English. John's kind would respect some definite, concrete problem involving red brains, not pink ones.

Throughout the first ten years of a child's school life, too much is made of subject matter and not enough of the mechanics that

as well as not could accompany it, did we not project our experiences for those of the child. The tendency is likely to be in this direction for some time to come, for text-books, courses of study and teachers seem to be of the opinion that attention to mechanics has a tendency to strangle fluency. That point of view is much easier on the teachers, of course; teaching mechanics makes the work more difficult for both pupil and teacher.

From the rumblings heard in business offices, a change of policy in teaching written composition will probably start, unfortunately, outside the realm of pedagogy. Unquestionably employers of high school graduates as stenographers—admitting a course in business college—have the best of the argument. Something really is wrong when it requires twelve years in school to learn to write, imperfectly, a letter although that letter is dictated. Of what use is fluency, unless it can be put up ready for use? One should learn much about his language in twelve years; the French manage to.

A vast amount of informational data concerning written composition has been collected by educators during the last several years. And some of their findings are not at all flattering or comfortable to teachers of English; in fact, some of these fairly shout of what resembles gross negligence.

Purdue University gives the following theme as the type of work done by the average freshman applying there for entrance:

> "Last summer a friend and I went fishing to a near-by stream. We fished very steady for about thirty-minutes, and had no luck. Then we changed locations. Here we caught Forty fair sized bass, in a little less than an hour. Then we quit fishing, and went swimming. We were in the water about three fourths of an hour. Then we dressed. Took a rest under a near-by tree. After we had layed as long as we cared to, we tryed our luck fishing again. But we had no luck at the first place we tryed so we went up stream a short way. Here we had another streak of good luck. After we were tired fishing we divided our fish, and each of went our way home."

Someone says: "Oh, I know plenty of fourth-grade children who can beat that; guess there is some mistake about it." This does not represent the best that all freshmen entering college can do—merely what the average person entering college does. It is indeed an eloquent commentary on our system of easy standards in written composition—our practice of accepting inferior work, or mollycoddling the children.

Perhaps, when colleges and high schools show greater concern for what is being done in the elementary grades; when we have developed a language-consciousness to the extent that our mother-tongue takes precedence over grades and degrees; when councils are composed of three sections instead of two,—college, high school and elementary school,—then the day of low standards in written composition will have passed, and mollycoddling in this respect will be a thing unknown.

Roses

They bloom and fade beneath our eye:
Their petals fall without a cry:
We say they die.

A bud: a breath of sunny morn:—
In couch of green and purple thorn
The rose is born.

Through branch and leaf life onward flows.
The claim of death upon the rose?
Ask God, who knows.

Ask if it dies—(Hath death such power?)
Or lives a spirit-life an hour,—
As bud: as flower.

I look upon them reverently;
In beauteous bloom they seem to me
Love touches of Divinity!

Alda Dorothea Leaw,
Philadelphia, Pa.

American Notes—Editorial

Not long since two mothers were comparing notes in regard to experiences in bringing up their children. One of them spoke somewhat as follows: "I just don't know what is the matter with my Harry. I don't get along with him at all. He simply won't do what I tell him. He does just what he wants to, regardless of my wishes. It's terrible to have a child like him. But I am determined to conquer him. I am going to make him come under, even if it takes months or years to do it. He has got to learn that what I say must be done and done promptly. *His will has got to be broken.*"

Not infrequently a teacher will take a similar attitude and use the same expressions in regard to a pupil, or several pupils.

What is the matter with such an attitude? What is wrong in such cases?

We answer: "Everything basal, fundamental!" Such antagonisms, in the home or the school, are absolutely subversive of all that is right and good and helpful. They thwart the purpose for which homes and schools have been established. They destroy happiness. They ruin physical and mental as well as moral health. They are equally degrading to child and parent, to pupil and teacher. Yet they are common experiences. The case mentioned is typical. How can difficulties like these be avoided?

Usually, such troubles are based upon *a wrong psychology.* When the mother above referred to, said that her boy's will had got to be broken, she was less wise than angry. She had evidently approached her boy from the wrong angle. *His* spirit and attitude had had more of her attention than *her own.* What the lad needed was sympathy,—insight into his difficulties and needs arising out of his inexperience and undeveloped faculties. The worst thing his mother could think of doing was to antagonize him. He needed love and a sympathetic hand to lead him,—not scorn and a disposition to make him come under. To establish self-control we must teach it by example. To substitute considerateness of others for selfishness we must ourselves be unselfish. To displace a spirit of wilfulness and lawlessness we must guard our own words and conduct, so that they shall not be antagonistic. We should use methods that soothe, not those that excite and challenge. The moment we lose our self-control, that moment we cease to control others. This is true in war and in peace, in home and school, in business and in society.

We heard of a school, the other day, which illustrates the point we

are here discussing. It had had the reputation of being the worst school in the State. Principal after principal had failed to keep order. Teacher after teacher had given up discouraged. A new principal came. He began by discussing with the boys their sports and other out-of-door and out-of-school interests. He was interested in their problems and organized them,—letting them elect their leaders of various kinds,—and showed them that he liked to be with them for his own sake, and asked them to consider him, as far as possible, as one of them.

When the first out-cropping of the old spirit appeared in the schoolroom, he just pointed his thumb toward the door, with a significant gesture toward the offender, without for a moment interrupting the recitation that was in progress. The boy knew instinctively what the gesture meant. He felt the authority that was behind it. He had learned to respect the leader who did not scold and hate. He could not resist the compelling personality, which was compounded of righteousness, love and understanding sympathy. He obeyed,—going from the room; and came back later, cured of his rebellious spirit.

This is the way to *break the will* of those of our charges who are wilful. Get the psychology of it! The self-controlled, true, right, loving, sympathetic spirit in ourselves is "catching." It will win where all else is helpless and in vain.

Dr. Edward Howard Griggs, lecturer and author, speaking recently in Boston, declared that the highly specialized education and training of today will defeat its own aims unless it rests on the now neglected background of culture, or the worth of living.

"We need,' 'he said, "a revival of general culture over specialized education. In one way it is necessary to specialize. One-half of all the world knows has been learned in the past century, and the tendency is to drive a person into a narrow limited wedge of this knowledge to make his work effective. The cry today is for 'education for efficiency.' Even in the grammar grades this specialization is begun.

"We have lost sight of the soul, of what makes life worth while. Such specialization may defeat its own aim, because it can mean nothing except in relation to other things. A man cannot know Greek history unless he knows Roman, Egyptian, Syrian, and other histories. In industry extreme specialization does not make of man even a good cogwheel. And his descendants must suffer because of the specialization. Our technical schools are turning out marvelously efficient engineers, men for leadership, but uncultured. Their own lads are often ashamed of them, but they cannot even see that culture

is desirable in another. I have seen groups of salesmen in smoking cars, men who are the future business leaders, and whose appearance is attractive until they open their mouths. They have no regard for grammar. We have much education but little culture today.

"How can we expect authors to rise much above this public. In newspapers, a young journalist is afraid to write beautiful, accurate English. He knows that what is wanted of him is sensational language, and why should he give what isn't wanted? Reading newspapers today is the prostitution of one's literary taste.

"The average modern novel is little better than a literary opiate. To give an example: Sherwood Anderson was given a prize of $2,000 for his 'eminent service' to the literature of America. I read the book which won him fame, and found more than one hundred passages which were inaccurate or ungrammatical. 'Main Street' is filled with vulgarisms. There is no excuse for it; it is just slovenly work. Particularly bad is the journalistic invention of words to take the place of 'said,' such as 'twanged,' 'bleated,' or 'yammered.' Most writers of best sellers are ruined by their first best seller. It is sheer commercialism, the opposite of what must produce literature."

Dr. Frank F. Bunker, executive secretary, Pan Pacific Union, has published in the "Pan-Pacific Union Bulletin" the following comments upon the World Conference on Education and the Pan-Pacific Sub-Conference, Oakland-San Francisco, June 28 to July 6, 1923. We reproduce them in order to give our readers full and authoritative information of one of the very greatest and most significant educational gatherings in the history of civilization:

"The National Education Association of the United States sends cordial good wishes to the educators of all nations, and extends to you an invitation to join in a World Conference on Education, June 28th to July 6th, inclusive, at Oakland-San Francisco, in connection with the annual meeting of the National Education Association. The purpose is to produce a better understanding among the nations; to develop good will; to conserve the integrity of all nations; to extend educational privileges more universally, and to develop those ideals conducive to lasting peace."

Over the signature of William B. Owens, president, and Augustus O. Thomas, chairman of the committee of foreign relations, the National Education Association of the United States is thus inviting the educators of all nations to participate in what gives promise of being the most notable international gathering of educators that has ever convened.

A meeting to be great requires a great theme. Surely no convention can address itself to a nobler or more inspiring theme than that of developing good-will among nations, out of which comes lasting peace. The National Education Association, in calling a conference of the educators of the world for the consideration of such a theme, is responding to the growing recognition among people everywhere that the day of selfish nationalism among people must pass. Heretofore, the modern state has been so preoccupied with the task of overcoming the physical difficulties of its location; with increasing its population and supporting it; with developing its natural resources; with effecting internal organization; with enlarging the circle of its territorial jurisdiction; with extending its trade and consolidating its gains,—in short, it has been so busy with the business of obtaining for itself a secure and more ample existence, that it has developed in its people an attitude of mind that is at once aggressive, sensitive to offense, and narrowly nationalistic in outlook. Only slowly, reluctantly and incompletely has this attitude yielded to the conception that all matters affecting the relations of nations must be viewed in the light of what is best for all. The World War brought up the state which was dominated to an unparalleled degree by selfish nationalism, with a sharp turn, and, in teaching the arch-ruffian among nations that there are international rights and relationships that cannot be violated with impunity, it has conveyed to the sharpened senses of other nations, as well, that a new order is being ushered in, an order in which the idea of merciless nationalism must give way to the more genial and friendly impulsions which spring from the possession of the international consciousness.

Except possibly for the graduate departments of some universities, the school, as an institution, is a follower and not a leader. It reflects what has already been thought and done. It does not create. Its chief function is to "dig in,' 'to consolidate gains, to help in holding civilization's line of advance. It has never been a Moses going forward with glorified vision, leading the children of men out into hitherto undiscovered lands of thought and action. Indeed, in the entire history of the school, no successful reform anywhere has ever been initiated by it, though many attempts have been made. It is the mind of the group that is dominant that initiates things, and to which the school must respond.

The mind of the great world-group has said that there must be peace on earth and good-will among men must prevail. Sooner or later, statesmen, diplomats, generals, financiers, the captains of industry, everywhere, must bow in deference to the will of the group. It is the business of the school to assist in making articulate and

effective this longing of the human heart, which was never deeper or more general than now.

The National Education Association has invited the Pan-Pacific Union to hold a sub-conference of Pacific educators at the Oakland-San Francisco meeting. As the time at the command of the conference is short it is thought best to center upon one thing and try and get somewhere with it; so, out of the recognition of the great importance of the school as an agent of internationalism, it is proposed that an inquiry be made as to how educational institutions and agencies, everywhere, can best function in this field.

The program of the Sub-Conference, as it now stands, follows:

General Theme. How can the educational agencies of Pacific countries best promote international understanding and friendliness?

1. General Introductory Papers.
2. Chief Divisions of School Systems—Institutions of Higher Learning (Universities); Schools of the Secondary Division (High Schools); Schools of the Elementary Division (Common Schools).
3. Special Institutions and Organizations—Teacher-training institutions; Theological schools and departments; Associations of Teachers; Text-book publishing firms; Public libraries.
4. Special Subjects of Study—The Teaching of History; The Teaching of Civics; The Teaching of Commerce and Economics; The Teaching of Geography; The Teaching of Languages and Literature; The Teaching of the Arts; The Teaching of Morals.

It is expected that every country of the Pacific will be represented on the program by its leaders in educational thought and practice.

The Department of the Interior, through the Bureau of Education, announces the receipt of an invitation, extended through the Minister of the Czechoslovak Republic by the Czechoslovak Ministry of Public Schools and Education, to all the institutions in the United States interested in the program to send delegates to an International Congress of High School Professors, to be held at Prague, Czechoslovakia, during the last week of the month of August, 1923.

The main problems which will be discussed at the Congress are: Moral Education; Examinations at the termination of High School courses; The Relation between the Family and the School; Reorganization of High School Education; Education of Women; International Exchange of Correspondence; Reciprocity of Diplomas; Federation of Intellectual Workers; International Codification.

Further details in regard to the Congress may be obtained by addressing the Ministry of Public Schools and Education, Prague, Czechoslovakia.

Book Reviews

In the Charles E. Merrill Company's series of MODERN LANGUAGE TEXTS we have the following volumes:

PAS A PAS, by Beatrice Shaw McGill and Waldemar De Lautreppe, with illustrations by Joseph Franke;

LA POUDRE AUX YEUX; Comedie en deux actes, by Eugene Labiche and Edouard Martin; edited by Mary C. Belknap, A. B.;

COLOMBA, by Prosper Merimee; edited by Charles E. Young, Ph. D.;

LE PARI D'UN LYCEEN, by J. Chancel; abridged and edited by Suzanne Roth, M. A. and Othon Quinche B. es S.; illustrations by Margaret Freeman.

Also a FIRST FRENCH BOOK, by Jacob Greenberg, A. M.; illustrations by Joseph Franke.

There is no series of modern language text books that surpasses that of the Charles E. Merrill Company in attractiveness of appearance, inside and outside. They are of convenient size. The type used is of suitable size and the impression clear. These texts are attractively illustrated and include suitable questionnaires, vocabularies, exercises, notes. Teachers of modern languages should examine the Merrill texts before finally settling the question of supplies for class use in coming terms of school and college modern language work.

SUPERVISION OF THE SPECIAL SUBJECTS, with special application to Manual and Industrial Arts. By L. S. Greene, M. S. The Bruce Publishing Company. Price $1.35.

The author is State Supervisor of Industrial Education for Florida and Professor of Industrial Education in the University of Florida. This book is one of the first, if not the very first book devoted entirely to the subject of training for supervision. It gives a helpful diagnosis of the special function of supervision, and particulars about supervision of industrial teaching. It is a very helpful, suggestive little volume, and will be welcomed by a constantly enlarging number of school and college teachers who are called upon to perform services of this nature. There are four main chapters, which discuss: (1) the general field of supervision; (2) the executive duties of the supervisor; (3) the supervisor's duties of organization; (4) the professional relations of the supervisor.

I BELIEVE IN GOD AND IN EVOLUTION. By W. D. Keen, M. D. Published by J. B. Lippincott Company. Price $1.00.

The title is in itself almost a review of this sincere and effective presentation of a subject about which there is a difference of opinion among scholars and thinkers. The sincerity of the author is unquestionable, and he has presented a groundwork of evidence, which has materialized for him in his professional work, that satisfies the demand of his own mind, both as a scientist and as a Christian. His chapters are well worth reading.

MICHELET'S JEANNE D'ARC. Edited, with introduction, notes, questionnaire and vocabulary, by Philip Warner Harry, Ph. D. The Stratford Company.

An attractive volume of convenient size, illustrated, and containing a map and other necessary helps for a class text for the French class.

AUTOMOTIVE MANUAL FOR LABORATORY AND REPAIR SHOP. By Albert Leroy Taylor, M. S. E., and A. Harold Blake, B. S. Macmillan Company.

A book combining theory and practice in order that actual shop work may bring to the students' comprehension the broad principles underlying the actual machinery with which they are working. The volume is fully and suggestively illustrated.

INTRODUCTION TO THE USE OF STANDARDIZED TESTS. By Denton L. Geyer, Ph. D. The Plymouth Press, Chicago. Price 50 cents.

A helpful manual for those who are introducing modern Tests in their classes. Will help in determining which system to choose,—and how to make it most successful.

THE TEACHING OF FRACTIONS. By Edward Wildeman. The Plymouth Press, Chicago.

A valuable pamphlet devoted to the subject of common and decimal fractions. Will prove most helpful to inexperienced or poorly prepared teachers, and will cultivate interest and facility in handling class-room work in this fundamental subject.

READING FOR REALIZATION OF VARIED EXPERIENCE. By Sterling Andrus Leonard. J. B. Lippincott Company.

A reading list, carefully graded and for suggestive guidance of pupils in the grades and upward through the Junior and Senior High School.

PRACTICE TESTS IN COMMON FRACTIONS. By Edward Wildeman. The Plymouth Press, Chicago. A companion volume to the previously mentioned manual.

A DESCRIPTIVE BOOKLET ABOUT THE LINCOLN SCHOOL OF TEACHERS COLLEGE. Published by the School and full of interesting suggestions of new ideals and methods. Would stimulate thought and suggest methods to almost any intelligent and ambitious teacher.

JOHN BASCOM, PROPHET. By Sanford Robinson. G. P. Putnam's Sons. Price $1.00.

A study of the life of a great thinker and of his influence upon the thought of his time. He was a man who helped his age in reconciling the theories of the scientists and those of the theologians, vindicating the real underlying principles of both science and religion and so saving many from shipwreck of their faith.

EXERCISE BOOK TO ACCOMPANY ACTUAL BUSINESS ENGLISH. By P. H. Deffendall. The Macmillan Company.

Covers grammar, construction, punctuation, values of the different parts of speech, etc., etc. Forty suggestive lessons in all. Excellent for business schools or for private individual use.

STUDIES IN SECONDARY EDUCATION. I. University High School. University of Chicago. Published by the University of Chicago Press.

A series of suggestive studies in education by nine university teachers. Each study brings out principles of pedagogy and makes helpful suggestions that will be of real value to teachers and students anywhere. Such subjects as Elementary Science, Constructive Student-Accounting, the Curriculum in History, Organization and Technique of a Teaching Unit in English Classics, etc., make up this helpful volume.

TEACHERS' MANUAL. By Fannie W. Dunn. The Macmillan Company. Paper covers.

A brief manual to accompany the Everyday Classics First Reader. Will show how to make the reading lesson pleasant and valuable.

PALMER METHOD READERS. A Primer. By William Alexander Smith. The A. N. Palmer Company.

The result of years of child study and classroom experience. It studies the mind of the child and seeks to show teachers how to appeal to the right motives and secure interest and self-direction in both study and play.

SCHOOL PROGRAM IN PHYSICAL EDUCATION. By Clark W. Hetherington. Formulates the principles involved in a program in physical education to meet the needs of children who are to become the citizens of tomorrow. World Book Company, Yonkers, N. Y., publishers.

PROSPERITY AND HOW TO ATTRACT IT. By Orison Swett Marden. Success Magazine Corporation, New York.

Another of Marden's "getting on in life" books. This author is a marvel. He knows young folks and he knows the world and its life. He puts two and two together and they always make four. One cannot help admiring his persistence and his comprehension of the life problems of those for whom he thinks and writes. The price of this volume is $2.

AN EXPERIMENT IN NUMBER-TEACHING. By J. B. Thomson. Longmans, Green and Company. Price 80 cents.

A personal account of an experiment worked out in the Crimsworth Demonstration School along the lines of the Montessori Method. Will prove very suggestive to teachers who are beginning the teaching of Arithmetic to beginners.

HANDBOOK OF EFFECTIVE WRITING. By Walter Kay Smart, Ph. D. Harpers.

A clear and comprehensive presentation of the principles of written composition. An excellent text that will find its place in the schools and that may well be studied with careful thoughtfulness by those aspiring to journalism as a profession.

SUPERVISED STUDY IN MATHEMATICS AND SCIENCE. By S. Clayton Sumner, M. A. Macmillan Company.

A valuable manual giving typical outlines of many topics and subjects, leaving it to the teacher to make use of them, suggestively, as may be thought best. The use of this manual will tend to make the pupil see how to study and how to learn, thus opening the way and furnishing the motive for original interest and activity in the subject. The adjective "suggestive" is the one by which to describe this volume; and this is high praise; for many teachers fail because they do too much of the pupil's work *for* him and to show the pupil how much the teacher knows, instead of so supervising him that he shall show the teacher how much he, the pupil, can do with the subject in hand.

WIND AND WEATHER. By Alexander McAidie. Macmillan Company. An admirable little manual explaining the modern principles by which the Weather Bureau does its work. The public, as well as the student of meteorology, will be interested in this manual.

PLANE AND SOLID GEOMETRY. By Walter B. Ford and Charles Ammerman. The Macmillan Company.

Two points stand out in the aims of the authors of this book: (1) Problems drawn from the affairs of practical life are inserted in considerable number, to illuminate the geometric facts and to make clear their importance and significance; (2) To soften the austere and unnatural style that has frequently proved a bar to ready comprehension, and to avoid an excess of symbolic characters and technical phrases that do not add to the reasoning.

In accordance with the second aim, the "given" and "to prove" are explained by words more than by geometric symbols. Many proofs also are more wordy than usual. The easy introduction gives an acquaintance with the more common construction problems, and is followed by a presentation of the first principles. Deductive geometry begins with the two theorems on congruent triangles by superposition. These proofs are treated in a full, descriptive manner. As the pupil gains confidence the reasons are gradually omitted and left for him to discover. Some proofs, especially in solid geometry, are to be developed in the class. This is very desirable in both plane and solid geometry. A part of every class period should, as a rule, be devoted to work of this kind. Three definitions are out of the ordinary because they are usually theorems: (1) Two triangles are similar if their corresponding sides are in proportion; (2) Two planes are perpendicular when any line drawn in the one perpendicular to the intersection, is perpendicular to the other plane also; (3) Two trihedral angles are congruent if the face angles of the one are equal respectively to the face angles of the other and in the same order. The substitution axiom allows "any expression" instead of "an equation or inequality." The illustrations are plentiful and excellent. Many of the practical problems and most of the theorems of solid geometry are visualized by half-tone cuts. In the introduction to solid geometry, some of the simpler theorems are assumed.

The book is compact, attractive, interesting, and suited to the capacities of the high school pupil. Hence it is worthy of consideration by those who desire to teach geometry.—Review by Robert R. Goff, New Britain, Conn.

COLLEGE BOARD AND REGENTS QUESTIONS AND ANSWERS IN ENGLISH. College Entrance Publishing Company. Price 40 cents. Contains thirty-one Board papers actually given since 1916,—with answers.

JUN 11 1923

THE NEW STONE, BRONZE AND EARLY IRON AGES. Written and illustrated by Marjorie and C. H. B. Quennell. Ninety illustrations. G. P. Putnam's Sons. $2.50.

A book that traces the historic unfolding of man's genius and life as recorded in his material achievements in working with "Old Stone," Palaeothic Age; "New Stone," Neolithic Age; "Bronze" and "Early Iron," —denoting his development through various stages. The story is made interesting, and suggests the responsibilities and the privileges which we enjoy who live at this later day, when man's knowledge and mastery of nature and material things has been so far advanced by the thinking and the labors of those who have gone before.

MODERN HISTORY. By Carlton H. Hayes and Parker Thomas Moon. The Macmillan Company. " "

An entirely new work in modern European history for high schools. It is clear, comprehensive, interesting. It was written after the late World War, and is in no sense a revision of any previous book. This is a distinct advantage and will be of great influence with those who are intending to introduce a new book for the use of the classes in History. Recent questions connected with the World War are noted, and the question, "Why modern nations fight," is fully considered, as is, also, the question as to what nation and what persons were mainly responsible for the World War.

THE FRENCH REVOLUTION. By Shailer Mathews. Longmans, Green & Co. $2.00.

A thorough treatment of a great subject by a well qualified scholar. Napoleon is shown to have been "integrally a part of that great period of social change which we call the French Revolution." The author strives to present the spirit of the French people as well as their deeds. The volume makes a valuable addition to the list of texts for mature students of history.

THE SULU ARCHIPELAGO AND ITS PEOPLE. By Sixto Y. Orosa, M. D. The World Book Company. $1.20.

This small volume tells a great story of the gradual victory of civilization and Christian views of brotherhood and love, over the hatred, cruelty and barbarism of a former period in the history of the peoples inhabiting the Philippines. It is written by the District Health Officer of Sulu, who is also Supervising Physician, Sulu Public Hospital and Quarantine Officer for the Port of Jolo, Sulu, P. I.